

FORD PLANS SENT STEEL COMPANIES

Japan, Great Britain Accepts U.S. Interpretation Of Treaty

'ROUND 'N' 'ROUND

One hundred and thirty-four Richmond Union high school students received their diplomas at the graduation exercises held in the school auditorium Wednesday night.

To some graduation means the start of their life's work. To others it means that years of college will start— and ahead of that lies a professional career.

School days were wonderful thing. And the more one works and strives to satisfy that economic need that one calls ambition, the more one wishes one were back in school.

But, nevertheless, these graduates are armed with a weapon that will aid them in life's fight — a high school diploma.

Once upon a time it was only necessary for one to have a grammar school education.

And then the standards shifted to two years of high school work.

Today most employers demand that their workers have a high school education.

In a few more years the standards will again shift and it will be necessary that all workers have a college education.

Stamp collecting is an art in itself. If one can believe some of Richmond's stamp collectors.

One person of whom we know, spent more than \$10 to get special stamps that were on letters brought over by Graf Zeppelin.

Play day will be observed in Richmond this year with special services.

This is the first time in many years that such services have been held in the city.

SLOUGH JOB PROGRESSING

According to E. G. Ryder, assistant industrial agent for the Santa Fe, and City Engineer E. A. Hoffman, work on the dredging of Elms slough on the west side of the Richmond inner harbor is getting in full swing.

Two drag outfits will soon be at work, and the work of throwing up a dike across the yacht harbor at the Duncan-Harrelson property was started yesterday morning, after most of the larger yachts and launches had been removed.

Ryder, who has spent three days at the yacht harbor, warning boat owners to remove their craft before the dredging started, declared that all vessels will be out by tonight.

YESTERDAY IN CONGRESS

SENATE
Bishop James Cannon Jr., of the Southern M. E. church, walked out on the lobby committee, ending today's questioning of him.

Agricultural committee continued hearings on eros.

Finance committee considered veterans' legislation.

Senator Sheppard, Dem., Texas, introduced a bill providing for punishment of liquor buyers under the Jones law, supplementing his bill to make the buyer equally guilty with the seller under the Volstead Act.

Naval subcommittee, exonerated the navy of blame in the resignation of Lieut. Al Williams, speed pilot.

Vice-president Curtis ordered one section of the tariff bill relating to rates, back to conference.

HOUSE
Sent tariff bill back to conference.

ARTICLE 19 CHALLENGED BY SENATE

WASHINGTON, June 5.—UP—Acceptance by Japan and Great Britain of the American interpretation of replacement clauses of the London Naval treaty is insisted upon by the Senate foreign relations committee was announced by the State Department tonight.

The State Department issued the text of its note to London and Tokio and the British and Japanese replies. The replacement clause comprising article 19 of the treaty was challenged by several Senators including Swanson, Dem., Va., who proposed its phraseology be clarified by an exchange of notes.

Appearance of the notes followed a day of conferences and statements in which President Hoover reiterated insistence upon early treaty action and Senator Johnson, Rep., Calif., called on his colleagues to resent efforts to coerce the senate.

President Hoover called Stimson and Chairman Borah of the Senate foreign relations committee to the White House and expressed his desire for early action.

"I did not say to the president," Borah said, "but I say now that I felt the committee was entitled to all the facts which would throw any light upon the treaty, even at the expense of what some seem to think is delay. But when the facts are all in I feel that we should dispose of the treaty."

A messenger was dispatched tonight from the Senate department to deliver a copy of the note to Borah and through him to the committee. Article 19 was challenged by senators who feared its provisions would permit Britain and Japan to replace with 18 inch cruisers vessels armed with six inch guns which became obsolete during the life of the treaty or for whose replacement keeps could be laid before the treaty expired.

Japan's note was an unqualified acceptance of the American theory that six-inch cruisers can be replaced only by six-inch cruisers. British accepted but "without prejudice" to another section of the treaty which was interrupted by Britain to mean she could replace the seven and five tenths inch gun cruisers Frobisher and Effingham with cruisers of similar in 1936.

Nevertheless, as the transport nosed heavily into the harbor mud and turned on its right side, sea water rushed into the cabin, driving passengers to the opposite side and onto one of the wings.

Hastily assembling ropes and other paraphernalia, airport attendants who had witnessed the fall of the plane put out to the scene in a small motor launch and two rowboats. A Coast Guard patrol boat from the east Boston station was in the vicinity and its crew co-operated in extricating the trapped passengers.

MARTINEZ, June 5.—With her arm mangled and her leg fractured, Mrs. Rose Nevis, of New York, was in serious condition at a Martinez hospital today, following an auto-train crash near the Gould ranch.

Mrs. Nevis and her sister, Mrs. Frank Mendonca of Danville, were riding in a machine across the Southern Pacific grade crossing when the train hit them broadside, throwing the car 25 feet into a ditch. Mrs. Mendonca is suffering from bruises and lacerations.

Dr. C. R. Leech, who passed the scene of the accident, stopped and administered first aid to the injured women, and then drove them to Walnut Creek.

Plans for an initiation to be held June 19 were made at a meeting of the Moose lodge in the Moose hall last night. E. B. Lowery, dictator, presided.

Plans are also being furthered for the open house to be held June 26, when members of the Moose, the Mooseheart Legion and the friends will be entertained at banquet and program.

Millionaire Sued By Girl Dancer
LOS ANGELES, June 5.—UP—A \$200,000 breach of promise suit was filed today against Charles Davis, retired millionaire, by Miss Cano Morris, who alleged vice betrayed her under promise marriage.

Miss Davis alleged that she met Davis in New York when he was dancing in the Follies and he later sent her \$500 in Cleveland so she could come to Los Angeles and marry him.

The dancer declared that she arrived Davis made love and promised to marry her, and the complaint said, Davis to go through with the ceremony.

THE WEATHER
Fair and somewhat lower temperature today and tomorrow with moderate west wind.

Schools To Close For Vacation

"No more teachers, no more books."

This and other appropriate musical selections will be rendered at 3 o'clock this afternoon by thousands of Richmond school children as they descend the steps of the local public schools for the last time in two months.

Ideal weather has been prophesied for this greatest of all days for the small girl and boy—the last day of school. A huge run is expected at the Richmond auditorium and at the beach, as well as on every corner lot where baseball may be played.

Two months of Saturdays—what more can a fellow ask?

15 SAVED FROM WRECK OF PLANE

BOSTON, June 5.—UP—Less than 60 seconds after taking off for New York today, the Colonial Air Transport Nocomos, with two pilots and 13 passengers aboard, dived into shallow water in Boston harbor and was wrecked.

The 15 trapped occupants were rescued by Coast Guards and Boston airport attaches, but only after one passenger, caught in the rush of water that flooded the cabin had suffered so seriously from immersion that he died later.

Pilot Owen O'Connor, who was at the controls when a dead engine sent the giant plane hurtling into the sea, escaped with scratches and assisted with the rescue of passengers. Val Chick of Boston, relief pilot, suffered a broken arm and leg injuries.

Firemen, using inhalators and the prone pressure system, battled for two hours after the crash in a futile attempt to save the life of Paul S. Thorne, 43, of Brookline, a passenger. He was pronounced dead after failing to respond to first aid treatment.

Had the accident occurred 30 minutes later, every occupant of the plane might have been drowned, because it was low tide. The water into which the Nocomos plunged was only seven feet deep.

Nevertheless, as the transport nosed heavily into the harbor mud and turned on its right side, sea water rushed into the cabin, driving passengers to the opposite side and onto one of the wings.

Hastily assembling ropes and other paraphernalia, airport attendants who had witnessed the fall of the plane put out to the scene in a small motor launch and two rowboats. A Coast Guard patrol boat from the east Boston station was in the vicinity and its crew co-operated in extricating the trapped passengers.

RUM SUSPECT STARTS TERM

MARTINEZ, June 5.—Maintaining to the last that he wouldn't be a "squealer" George Evovich, 42, convicted of operating a still was today taken to San Quentin prison to start an indeterminate sentence of from one to five years. He has also been fined \$1000.

Upon appearing for sentence yesterday, Evovich told the court that his cousin, the late George Evovich had persuaded him to engage in liquor distilling and said that the cousin had told him he "needn't fear arrest in Contra Costa county, 'because of a pull'."

Evovich admittedly has been protecting persons involved with him in the operation of the plant.

Valley Apricots Shipped East

MARTINEZ, June 5.—The first carload shipment of Diablo valley apricots of the season, left Brentwood yesterday for New York. The fruit, picked before reaching complete ripeness, is exceptionally large and choice and heavy shipments will be sent to the east for several weeks, according to predictions.

BODIES OF GIRL, MAN FOUND

ROCHESTER, Mich., June 5.—UP—Marjorie Clemons, 13, and Henry Clouse, 46, a laborer, were found dead seven miles from here late today.

A blanket covered the body of the girl. Clouse lay beside her. A rifle was between them. Police said Clouse had shot the girl and then himself. A scant 100 feet away were the charred remains of Clouse's automobile.

Discovery of the bodies ended a five day search for Clouse and Marjorie, who disappeared from the Clemons' home Saturday.

Was Attacked
Preliminary police examination indicated the girl, a Rochester high school student, the daughter of Mr. and Mrs. Edward Clemons, had not been attacked before death.

Discovery of the bodies of the Precocious high school girl who wrote poetry, studied the history of music and read much, and the man who worked as a laborer, ended a search which had enlisted the aid of county, state and city police, Boy Scouts and private citizens. The countryside around Rochester had been searched since Monday, when Mrs. Clemons reported the absence of her daughter. A warrant charging kidnapping had been issued for Clouse and a reward had been offered for his arrest.

Police Baffled
Officials tonight said they were puzzled at the reason for Clouse's act.

For eleven years he had lived at the Clemons home, and had looked on Marjorie as his own child, according to Mrs. Clemons. Frequently he brought her presents.

Recently, however, Marjorie fired of the curls she wore, and which Clouse loved, and they were cut. The silent, woman-shy man gently chided her for having them cut, and on this fact alone police base a belief that something in his strange love for the girl he had known from infancy may have snapped.

Still Brings Fine Of \$500

MARTINEZ, June 5.—Because parts of a dismantled still were found on his ranch property near Marsh creek, James Cakebread was fined \$500 in justice court here yesterday.

The raid was made early Tuesday morning by the county sheriff and his deputies, who said the still had been dismantled only a few days prior to the raid. The sheriff expressed his belief that lack of water in Marsh creek, necessary for the operation of the plant, may have caused the operators to cease operations.

Cakebread testified that he knew nothing of the still.

Local Man Dies At Hospital

MARTINEZ, June 5.—Albert Radka of Richmond died today at the county hospital at the age of 70. He has been an inmate at the hospital for two years.

He is survived by his widow, Grace, and two daughters, Mrs. Ella Hoffmeyer of San Francisco and Mrs. Hazel Feversohn of Pasadena, and four sons, Frank of Oakland, George of Santa Maria, and Howard and Robert Radka of Richmond.

Funeral services will be conducted by the Brunser and Connolly chapel Saturday, with interment in Mountain View cemetery, Oakland.

Y. M. I. Delegates To Meet Elected

Delegates to attend the convention of Y. M. I. which will be held in Yosemite valley, July 22 were named at a meeting of Burke hall last night in Memorial hall.

Delegates to the convention are: T. M. Dowd and M. J. Corr.

Young Eagles



MEMBERS OF the Aviation Club of the Richmond Union High school have just completed a successful semester at the school. H. E. Welch is head of the club.

HURLEY NAMED ON BUILDING GROUP BOARD

City Building Inspector A. J. Hurley was notified recently that he has been named a member of the executive committee of the Pacific Coast Building Officials' conference.

Hurley will assume his activities as a member of the board immediately.

Hurley has also been named chairman of committee No. 6 for special ordinance at the convention which will be held Sept. 29 to Oct. 4 at Long Beach.

Hurley will attend the conference.

Mrs. L. E. Felger Dies At Home

Mrs. Laurella C. Felger, 60, a resident of Richmond the past 18 years, passed away at her home at 886 McLaughlin avenue last night, after an illness of about six weeks.

Mrs. Felger was a native of Portland, Oregon, and is survived by her husband, Bernard Felger, her mother, Mrs. Annie Wardle of Carleton, Ore., two sisters, Mrs. Adie King of Alameda and Mrs. Ida Linden, Portland; and two brothers, Edward and Scott DeLaune. The two brothers are marine engineers and are at sea.

Funeral arrangements are now pending in the hands of the Ryan Funeral home.

Rotary To Hear Talk On Dry Law
Mrs. Paul Raymond, chairman for northern California of the Women's National Committee for Law Enforcement, will be the speaker of the day at the Rotary meeting today, and will base her subject on "What American Women Think About Prohibition."

The Rotary club recently had a talk from a prominent woman opposed to prohibition, and will now hear the other side of the question. Dr. U. S. Abbott is chairman of the arrangement committee and Walter T. Helms will be chairman of the day.

Men's Club To Hear Address

At the meeting of the Baptist Men's club to be held tonight at the First Baptist church, Miss Lillian Thomson, librarian of the Shanghai college, Shanghai, will be the principal speaker.

Ladies are requested to attend the meeting, at which a dinner will be served. A musical program has been arranged to follow the address.

San Gabriel Bank Robbed Of \$2000

SAN GABRIEL, June 5.—UP—Three employees of a branch of the California bank were locked in a vault by three bandits who escaped with \$2000. Harold Drebert, manager, was bound by the bandits but two girl employees, who were not tied, unbound the rope and Drebert was able to open the vault after the bandits left.

Hawaiian Arrives With 32 Children

SAN FRANCISCO, June 5.—UP—Something of a record could doubtless be claimed by Robert W. Shingle, president of the Hawaiian senate, here today on his way to Toronto for the Shrine convention. Shingle has 32 children—nine of his own, six adopted, and 17 foster children.

LOCAL BIDS ASKED ON WORK

DETROIT, Mich., June 5.—UP—Officials of the Ford Motor company today declared that contracts for the Ford assembly plant at Richmond, Calif., will probably not be let until late in July.

Officials declare that contractors are slow in turning in their figures on the work.

Plans and specifications for the steel work on the new Ford assembly plant which will be erected in Richmond are now in the hands of officials of steel plants in the bay region, it was revealed here yesterday.

Officials of the Judson Pacific steel company, of San Francisco and Oakland, declared yesterday that the plans were submitted to them several days ago.

These plans have been sent to the estimating department of the company who are studying them.

Bid To Be Made
As soon as the examinations are completed, the company will submit a bid on the work.

Officials of the company declared that the plans call for one of the largest steel jobs that have ever been done in this region.

It was also indicated yesterday that local contractors will have an opportunity to file bids on the construction work.

Bids Asked
Charles V. Bradbury, of the Richmond Plumbing and Heating company received a telegram in which he was asked whether or not his company wished to file a bid on the plumbing and heating work.

Dan Collins, of the Pacific Electrical Manufacturing company announced that his firm also had been asked to bid on the electrical work.

Names of Richmond contractors have been sent to Albert K. Campbell, general manager of the Ford Motor company, by Manager James A. McVittie.

Indians Given Long Sentences

BOMBAY, June 5.—UP—Three months rigorous prison terms were meted out today to 57 persons from Worli, who recently took part in raids on the government salt depot at Wadala.

The action brought the total of Wadala raiders so sentenced to 189. Today's defendants, like those who preceded them, sang revolutionary slogans in the courtroom. The prisoners were prosecuted for unlawful assembly. One was acquitted and seven were sentenced to one day of simple imprisonment as juvenile offenders.

A bulletin of the Bombay congress committee said that effective tomorrow, independence volunteers will picket every British shop selling cloth in the so-called Port area in which Europeans reside. The plan means ostentatious defiance of Viceroy Lord Irwin's new ordinance, which makes picketing a penal offense.

Band Concert Enjoyed Here

A crowd that taxed the capacity of the Memorial park last night attended the weekly concert of the Richmond municipal band.

Practically every seat in the park was occupied, attesting to high degree of popularity the weekly concerts have attained in Richmond.

Local Masons To Fete Official

At a stated meeting of McKinley lodge last night plans were made for the reception to Richmond of Grand Marshal Charles M. Wollenberg, and Grand Lecturer Baker, all Masons in the city will aid in the reception, which will be led by the McKinley branch.

Plans were also made for a social night to be held on June 26.

A buffet luncheon was served at last night's meeting.

Millionaire Sued By Girl Dancer

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Miss Davis alleged that she met Davis in New York when he was dancing in the Follies and he later sent her \$500 in Cleveland so she could come to Los Angeles and marry him.

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BARREL HOUSE DEFEATED BY REFINERY

The great Barrel House of Standard Oil championship fame went down to a 6 to 4 defeat before the Refinery nine in yesterday's Standard Oil Twilight league game.

The Barrel House boys had an uphill battle to fight through the greater part of the contest. Motta scored for the Barrel House in the second, but Zimmerman and Autry evened up things in the last of the same inning. Billy Lane scored for the Refinery in the third hitting a two bagger. Bartram and Autry scored for the Refinery in the fourth.

The Barrel House sluggers again came to life in the fifth when Schimpff came in from third, but Zimmerman again scored for the Refinery in the same inning.

Matteri trotted homeward for the Barrel House in the sixth, while Whetzel, Barrel House slugger, presented "Mexico" with a new baseball in the seventh.

Peacock did fairly well on the mound for the winners, striking out four Barrel House athletes, and allowed eight hits and three walks. Doyle Taylor didn't go over so big last night for the losers and was removed in the fourth inning after allowing six hits, four walks and striking out one hitter. He was replaced by Buttischach, who allowed four hits, no walks and struck out three.

The crowds at yesterday's Standard Oil clash swelled to almost record proportions, testifying to the interest being held by Richmond baseball fans in the revived league. The league is becoming one of the fastest, closest amateur circuits in the eastbay.

The box score:

REFINERY	AB	R	H	E
Lamarra, ss	3	0	1	1
Bartram, 2b	2	1	0	0
Lane, lf	4	1	3	0
Johnson, cf	2	0	1	0
Zimmerman, 3b	3	2	2	0
Deardoff, rf	3	0	1	0
Armentrout, c	3	0	0	0
Autry, 1b	2	2	1	0
Peacock, p	2	0	1	0
Hood, cf	2	0	0	0
Totals	29	6	10	2

BARREL HOUSE AB R H E
Matteri, ss 4 1 2 2
Schimpff, 2b 4 1 2 0
Vianni, c 3 0 1 0
Fitzgerald, rf 4 0 1 0
Whetzel, cf 4 1 0 0
Motta, 1b 3 0 0 0
Cola, lf 3 0 0 0
Kirkwood, 3b 3 0 0 0
Taylor, p 1 0 1 0
Buttischach, p 1 0 0 0
Avery, lf 1 0 0 0
Totals 32 4 8 2

Summary: Home run—Whetzel. Two base hits—Lane 2, Autry, Matteri. Taylor. Base hits—Off Peacock 8; off Taylor 6; off Buttischach 4; bases on balls—Off Peacock 3; off Taylor 4; off Buttischach 0. Strikeouts—By Peacock 4; by Taylor 1; by Buttischach 3.

Barrel House Defeat Athletics 6-5

BROOKLYN, June 5.—UP—Glenn Wright put through a spectacular double play to stop the Pittsburgh Pirates in the ninth inning after the Brooklyn Robins took the third game of the series, 6 to 5 today.

Drawings For Tennis Match Made Yesterday

Official drawing for the state tennis championship, which Richmond players have a strong chance of capturing, was made yesterday at Berkeley.

Perhaps the most prominent of Richmond's representatives is James Hurley, north coast high school champion. He will enter top flight junior competition for boys under 18 years of age, with William Trainer and Charles Hunt of San Francisco.

The official draw follows:
Women's singles, 1st round—Anna Shaw vs. Jane Pratt.
Women's doubles 1st round—Anna Shaw and Gertrude Heise vs. Helen Bristow and Claire Wilson.
Boys' singles, 1st round—James Hurley vs. Alan Wiel. (Seeded No. 3)
Boys' doubles, 1st round—Hurley and Carlin vs. Robert Lillenthal and Robert Pommer.
Girls' singles, 1st round—Margaret Hoey vs. Dorothy Workman. Seeded.
Girls' singles, 16, 1st round—Margaret Hoey vs. Alice Cooper.
Girls' singles, 16—Jennie Stark vs. Carol Seller.
Boys' singles, 15, 1st round—Philip Carlin—seeded No. 1—vs. By.
Boys' singles, 15, 1st round—Adrian Newman vs. Robert Pommer—seeded.

Boys' singles, 1st round, 15—James A. Butler vs. Tate Courthard.
This is the thirtieth annual tournament of the California State Tennis association and the ninth annual Girls Head Court championship, conducted by the Berkeley Tennis Club, Tunnel Road, Berkeley.

President of the tennis association, William "Burr" Johnston, with one out and Hensley and Mosoloff on the bases in the last inning, Paul Waner hit to flowers and his throw to Wright forced Mosoloff at second. Hensley tried to score with the tying run, but Wright's throw to Lopez doubled him at the plate.

and referees of the tournament, while Homer T. Miller secretary, is chairman of the committee in charge and William C. "Pop" Fuller, famous coach of Helen Willis and Helen Jacobs, now in Europe with the Wightman Cup team, is conducting the girls' national hard court championship event, his pet hobby, in which his latest sensation, Bonnie Miller of Berkeley is a star entrant.

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RAGS WANTED

BENNY
—AND IS YOUR MOTHER STILL LIVING?
—NOW, NOW, PLEASE DON'T TAKE IT LIKE THAT—
—I'M SORRY WE HAVE TO ASK THESE QUESTIONS. WHO WAS YOUR MOTHER?

AMERICAN TRUST COMPANY
Since 1854
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RICHMOND BRANCH: Teath and Macdonald
BRANCHES: Pt. Richmond—Twenty Third and Macdonald
Resources more than \$300,000,000

Kings Of Swat



THE BASEBALL team of the Richmond Union high school recently ended a successful season at the local high school. Members of the team are, left to right, back row, H. Transue, John Babich, Joe Bono, L. Ball and John Rosano; front row, left to right, John Rollino, Leslie Scarsella, Joe Viano, Mike Sanfilippo, E. Rogers, Ray Juillerat and E. Baxter.

Drawings For Tennis Match Made Yesterday

Talking It Over



BENNY LEONARD, left, former lightweight champ, talks over with Jack Sharkey the coming fight.

ODD FELLOWS TO PLAY BANK

Net Players To Enter State Title Matches

The Richmond Tennis association will be represented by eight athletes of local renown tomorrow in the California State championships on the Berkeley Tennis club courts.

The local entrants are Anna Shaw Gertrude Heise, James Hurley, Darrow Sutton, Phil Carlin, Margaret Hoey, Jennie Stark, Adrian Newman, and James A. Butler.

The entrants from Richmond will be competing with the fastest tennis players on the Pacific coast. One of the most outstanding competitors will probably be Bonnie Miller of Berkeley, latest find of Pop Fuller, coach of Helen Willis and Helen Jacobs.

The official draw for tomorrow's contest is as follows:
Women's singles, 1st round—Anna Shaw vs. Jane Pratt.
Women's doubles 1st round—Helen Bristow and Claire Wilson.
Boys' singles, 1st round—James Hurley vs. Alan Wiel. (Seeded No. 3)
Boys' singles, 18, 2nd round—Darrow Sutton vs. Jack Stewart.
Boys' doubles, 18, 2nd round—Hurley and Carlin vs. Robert Lillenthal and Robert Pommer.
Girls' singles, 19, 2nd round—Margaret Hoey vs. Dorothy Workman, seeded.
Girls' singles, 16, 1st round—Margaret Hoey vs. Alice Cooper.
Girls' singles, 16—Jennie Stark vs. Carol Seller.
Boys' single, 15, 1st round—Philip Carlin, seeded No. 1, vs. By.
Boys' singles, 15, 1st round—Adrian Newman vs. Robert Pommer, seeded.
Boys' singles, 1st round, 15—James A. Butler vs. Tate Courthard.

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UNION HIGH ATHLETES END SUCCESSFUL SEASON

By JAMES SMITH
Richmond Union high school has just concluded its first semester of competition in the Alameda County Athletic league, and one laurel already rests on the heads of the athletes of the Red and Blue.

Basketball, track, baseball and tennis have alternated in the athletic repertoire of the local boys during the past spring term, and starting at the bottom, Richmond has gradually worked up the ladder until it finished the season in a glorious tennis victory.

Richmond high received a hot reception upon its debut in league circles. Basketball was in season when the Richmond boys assumed league standing, and Richmond was consequently thrown into contact with veteran league teams from Berkeley, Alameda, Hayward and Emeryville.

Cage Season
Basketball season brought many disappointments to the Richmond Union high school cagers. In their first contest, they were defeated 20 to 14 by the Hayward Farmers. They lost to Alameda by a score of 25 to 19 on January 21. Emeryville lost to Richmond by a 17 to 11 score on Jan. 24. The strong Berkeley high school quintet defeated the Richmond boys 33 to 19, Richmond was leading 11 to 8 at the half, but the fast attack of the Berkeleyans finally broke through the inadequate defense of the local athletes.

Then, Richmond received a serious scare in the form of suspension from the Alameda County Athletic League due to vandalism conducted at the Hayward high school by local sympathizers. It was proved that the culprits were not pupils of Richmond high, but at this time Centerville received a similar visit from Hayward supporters and the league directors decided that both Richmond and Hayward be expelled from the league.

However, toward the end of the basketball season, the officials of the league reversed their decision and allowed the two schools to return to league status.

Beat Hayward
The good news came too late for Richmond to continue its hoop career in the league, so Coach Ivan Hill and Phil Hempler then scheduled a number of contests with non-league squads. The locals played two games against Hayward, and both contests were fought with tense interschool rivalry. Richmond won the first battle by a score of 15 to 10, and the second 23 to 17. The Richmond cagers lost a frantic game to the San Rafael Military Varsity crew by a 16 to 14 score.

Richmond then handed a 23 to 22 defeat to the University of California 145-pounders. The season concluded with a 33 to 15 defeat at the hands of the high school alumni.

Members of the Richmond Union high school varsity five for the 1930 spring season were: Rovedo, Myers, Marek and Viano, forwards; Passon, Kenny, Hoefler and McCain, centers; Brock, captain, Scarsella, Harold Drexel and Bascetti, guards. All of these boys, except Myers, Rovedo Viano and Bascetti will be with the local varsity next year.

B's Win Games
Richmond Union high school B cagers displayed a strong offensive brand of playing upon their entrance into the A. C. A. L. winning and losing two league contests. They defeated the Hayward Lightweights 16 to 10 in the first game of the season, but then lost to Alameda by a score of 22 to 11. The Richmond boys earned a 19 to 12 victory over the Emeryville hoop outfit, and lost to Berkeley 25 to 8. After the league season, they defeated Hayward 19 to 11, and later lost to the invading Farmers after a hectic battle, by a score of 20 to 19. Richmond easily defeated the San Rafael Military Academy five 21 to 13, and then lost to the U. of C. 130-pound team. The local lightweights closed the season by taking the Alumni lightweights into camp by a 27 to 23 score.

The R. U. H. S. B's were captained by Johnny Rollino, star forward. Reslie Marcos was high point man for the B team, earning 13 points in each of his last five games. The other members of the squad were: Wilson, center; Rogers, Sanfilippo, guards; substitutes—Charley Dodge, Carl Johnson, Andy Miller, Glenn Conn, Bob Miller and Clarence Matteucci.

Track followed basketball in athletics at the local high school. Richmond re-entered the A. C. A.

L. with track competition. The Richmond runners, jumpers, and weight throwers succeeded in taking first, second and third places in all of their meets, but were unable to gain any complete victories.

Place 8 cord
In the first meet of the season, Richmond placed second in competition with Berkeley and University high schools. Berkeley earned 65 points, Richmond 41, and University 39. In this meet, Charlie Jackson won first place in the pole vault by making a leap of 11 feet, 6 inches. Howard Dalton placed first in the 440 yard dash for Richmond, and Dunleavy heaved the javelin for 153 feet to win second position in his event.

In a triangular meet with Castlemont and University High the Richmond team again placed second with 154 1-2 points. Castlemont was the victor with a total of 182 1-2, while University brought up the rear with 151 counters. In this meet, "Skip" Albert and Joe Robak both captured first places in two heats of the mile. Both boys crossed the tape many yards ahead of their nearest opponents. Bill Young, Grover Johnson, and Joe Robak cleaned all three first places in the half mile, while Palmer, Brock and Jackson gained first and second in the hurdles. First and second places in the shot and discus were taken by Locke, Carson, Brock and Bravin, of Richmond.

Carson was the only Richmond athlete to place in the Lowell Relays in Kezar Stadium, San Francisco. Carson placed third in the discus. Other Richmond boys competing in the track carnival were Loke, Dunleavy, Palmer and Jackson.

A. C. A. L. Meet
The big event of eastbay high school track season was the A. C. A. L. meet on the University of California oval in Berkeley. Dalton crossed the tape in second place in the 440 yard dash, while Albert captured third place in the mile grind. Both men were qualified to take part in the North Coast Relays at Stanford, but were unable to place in this state meet.

Baseball was the next sport to occupy the attention of the high school athletes. Due to the unfinished condition of the school diamond at the beginning of the season, the Richmond boys got out to a poor start in A. C. A. L. baseball competition.

The local nine lost the league opener to University high school by a score of 9 to 8. Johnny Babich collected two four baggers in this game. Bono chucked for Richmond.

The Richmond squad lost to Centerville 11 to 8 and then lost to Berkeley 7 to 4. Errors spelled the doom of Richmond high's fall aggregation in its next battle, in which it was defeated 46 to 3 by Hayward.

The local boys won their first game of the season by defeating the league-leading Alamedans 6 to 4. However, Richmond lost its next game to Centerville by a 7 to 3 score.

Beat Berkeley
Richmond came back to conquer the Berkeley boys 7 to 5. The local boys continued their winning streak by defeating Emeryville 6 to 4, but they dropped their next one by a score of 5 to 4 to Hayward. The Richmond diamond squad gained another victory over Alameda, the league winners, before the season was ended. This time the result was 2 to 0. The season closed with a 6-4 victory for Richmond over Emeryville.

At the end of the A. C. A. L. baseball season, Richmond was tied with Berkeley for third place with five wins and five losses.

Babich led the local team for distance hitting, collecting four home runs. Lemon led the local batting averages with 12 hits out of 24 times at bat. Lemon's batting percentage was 500.

Babich Leads
The pitcher's standings at the end of the season were as follows:
Babich 3 1 .750
Lemon 2 2 .500
Bono 0 3 .000

Simultaneously with the Richmond Union high school baseball season, the local high school tennis squad was reaping local, A. C. A. L. and state honors.

Their first practice game was held against the U. of C. Freshmen. The Richmond boys lost five of six sets by very narrow order, but the older college boys' athletic manager, Linwood Frates, and were complimented very highly on their playing ability by the assistant commissioners who will

California coach.
Lose To Berkeley
The Richmond net men again lost three out of four matches to the Berkeley high school team in their next match.

In their next practice game, Richmond defeated Piedmont high school, and then proceeded to rout the Concord net aggregation, taking all five matches.

Richmond at last entered the A. C. A. L. tennis competition, and proceeded to collect practically all league titles. Hurley Carlin, Avila and Sutton walked away with the league honors.

Hurley, who was victorious in division one of the A. C. A. L., then met state competition in the North Coast finals at San Mateo. He was victorious, and E. Arby gained the high school tennis championship of the northern section of the state.

Fallon Coach
This year's team was successfully coached by Clifford Fallon, veteran Richmond high net athlete. The members of this year's squad were: James Hurley, Philip Carlin, Darrow Sutton, Melvin Avila and Adrian Newman.

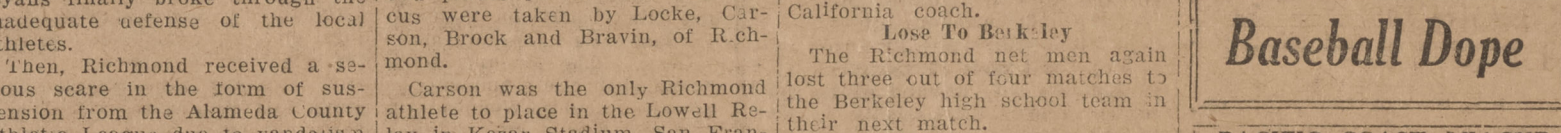
So, another season of clean, hard sport has ended at Richmond Union high school in a blaze of glory.

Good Prospects
The athletes of the Red and Blue are now ready to march once more onto the field of battle to bring honor to the colors of the Richmond Union high school.

Never have football prospects been brighter, never has competition appeared keener. Therefore, the coaches, Ivan W. Hillard and Phil Hempler, will be kept busy during the coming fall in preparing more record-breaking teams.

Supporters of Richmond Union high school must only wait and watch until the first pigskin goes hurtling into the blue to give the signal for battle on the gridiron.

Big Boys



MAX SCHMELING with two young admirers at his training camp—left, Johnny Hastings and George Sweet.

Baseball Dope

PACIFIC COAST LEAGUE	
Clubs—	W. L. Pct.
Sacramento	33 23 .589
Los Angeles	33 24 .579
San Francisco	33 27 .550
OAKLAND	32 28 .533
Mission	31 28 .525
Hollywood	25 34 .424
Seattle	34 25 .577
Portland	23 35 .397

YESTERDAY'S RESULTS	
San Francisco 8, Missions 7.	
Seattle 6, Oakland 2.	
Los Angeles 13, Hollywood 4.	
Portland 5, Sacramento 4.	

HOW THE SERIES STAND	
Missions 2, San Francisco 1.	
Seattle 2, Oakland 1.	
Portland 2, Sacramento 0.	
Los Angeles 3, Hollywood 0.	

TODAY'S GAMES	
Missions at San Francisco.	
Oakland at Seattle.	
Hollywood at Los Angeles.	
Sacramento at Portland.	

NATIONAL LEAGUE	
Clubs—	W. L. Pct.
Brooklyn	28 16 .636
Chicago	27 19 .587
St. Louis	24 22 .522
Pittsburgh	21 21 .500
New York	22 22 .500
Boston	18 23 .439
Cincinnati	18 23 .439
Philadelphia	15 24 .385

YESTERDAY'S RESULTS	
Brooklyn 6, Pittsburgh 5.	
Chicago 10, Boston 7.	
Philadelphia 10, St. Louis 4.	

AMERICAN LEAGUE	
Clubs—	W. L. Pct.
Philadelphia	30 15 .667
Washington	29 16 .644
Cleveland	26 19 .578
New York	23 19 .548
Chicago	17 24 .415
Detroit	19 27 .413
St. Louis	18 26 .409
Boston	14 30 .318

YESTERDAY'S RESULTS	
St. Louis 6, Philadelphia 5.	
Detroit 6, Washington 2.	
Cleveland 17, Boston 7.	
New York at Chicago postponed, rain.	

Longfellow Jr. High Officers Installed Here

Officers of the Longfellow Junior high school were installed in a novel fashion yesterday when they based their installation upon the play produced by the Thalias a few weeks ago. The original play was based upon the discontentment of people who wished to exchange any misery for a lesser one. Accordingly as the old officers expressed their grievances, a newly elected officer was ready to exchange his present position for the new responsibility.

Those wishing to exchange their offices for something else were: President Leo White; vice-president Howard Miller; secretary, Barbara Moore; treasurer, Dorothy Westwood; commissioner of law and order, Harvey Arbuckle; athletic manager, Norwood Pickering. Those fishing to undertake the new positions were: President Sheldon Hurley; vice-president, Lloyd Phillips; secretary, Doris Miller; treasurer, Edith Minter; commissioner of law out of six sets by very narrow order, but the older college boys' athletic manager, Linwood Frates, and were complimented very highly on their playing ability by the assistant commissioners who will

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SOCIETY NOTES

WAR MOTHERS HOLD BUSY MEET HERE

Richmond chapter of War Mothers held a busy meeting in Memorial hall yesterday afternoon. Plans were made for the Thimble club to meet at the home of Mrs. Anna Keaton, 566 Forty-first street, on Thursday afternoon, June 9, for a quilting bee.

The chapter will hold an apron party on Thursday, June 19, after an early business meeting. Mrs. Hilda Wicks will be chairman of the event and games will start at two o'clock.

Mrs. Josephine Washburn of Madera, first president of the chapter was a visitor at last night's session, and a new member was welcomed into the chapter, Mrs. Obedia Summers, 523 Thirtieth street.

MISS IMBACH HONORED AT PARTY

Miss Priscilla Imbach was the honoree at a party given by her parents, Mr. and Mrs. George Imbach, of 656 Thirtieth street, after the graduation exercises held at the Richmond Union high school. Many beautiful gifts were given to the graduates, among them a large decorated cake, presented by Mrs. Louise Kettlehut.

Decorations were carried out in the school colors of red and blue and the many cut flowers proved an attraction.

Mrs. Imbach and her mother are to leave soon for New York and Boston, where they will spend the remainder of the summer.

Whist Party At Druid Hall Tonight

A public whist party to be given at Druid hall is dated for tonight. Merchandise orders of \$2 are to be given as prizes for every two tables, and the large door prize is on display at the West Side Market. Victoria Marchese has been appointed as chairman.

Mrs. C. L. Theis To Return Today

Mrs. C. L. Theis and her daughter, Mrs. Ralph Anderson of Garvin avenue, are expected home Friday, after a week's visit in Exeter.

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You may have your FOOT TROUBLES PROPERLY cared for by—
Dr. L. G. Cupp
Chiroprapist
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For Appointments, Call Rich. 1922
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MEZZO SOPRANO
A Singer who teaches
A Teacher who sings.
Fridays—All day and evening
440 TENTH STREET
Tel. Richmond 2476
626 Beacon Street, Oakland
Tel. Oakland 6383



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Our merchandise is marked in plain figures. Whether your account is \$100 or \$1000 the same surroundings and courteous service is at the disposal of all patrons.

Wilson & Kratzer, Morticians
Lady Attendant—Ambulance Service
Bissell Avenue at Seventh Street Phone Richmond 113

J. PERRELLI CLAIMS BRIDE AT SAN JOSE

A wedding of considerable interest locally took place in San Jose Sunday when Miss Marie Filippi and Joseph Perrelli were united in matrimony, the St. Patrick's church. A wedding breakfast followed at Gilroy where the bridegroom resides.

The bride is the daughter of Mr. and Mrs. A. Filippi of San Jose, and Perrelli is the secretary of the firm of Filice and Perrelli of Richmond. He is a graduate of the University of California.

The couple are making their honeymoon via motor through the Canadian Rockies, and will make their home in Richmond.

NYSTROM P.T.A. INSTALLS NEW OFFICERS HERE

Mrs. Fred Cooper was installed as president of the Nystrom P. T. A. at the meeting of the organization yesterday afternoon at the school. Other officers installed were: Mrs. Owenby, vice president; Mrs. A. W. Josey, second vice president; Mrs. L. Waddingham, recording secretary; Mrs. Shaw, financial secretary; Mrs. Turnan, treasurer; Mrs. Ethel Hargue, historian; and Mrs. Janet Hadse, parliamentarian.

MISS HUCKA PAID HONOR WITH PARTY

Honoring the graduation of their daughter, Miss Alene, an informal reception was held by Mr. and Mrs. R. D. Hucka, after the commencement exercises held Wednesday evening at the Richmond Union high school. Miss Alene Hucka entertained a dozen friends in an informal gathering.

San Pablo P. T. A. Seats New Officers

Installation for newly elected officers of the San Pablo P. T. A. was held by Mrs. C. B. Blake, local past president of the association.

The other new officers are: Mrs. W. G. Gemmer, vice-president; Miss Mary Jette, secretary; Miss Hopkins, historian; Mrs. Fritz Carfield, auditor; Mrs. A. G. Silvery, treasurer; and A. E. Palmer, parliamentarian.

Palmer, the only man to have the distinction of being the first and only officer of the P. T. A. council was presented with a past president's pin.

A report of the school banking was made which showed nearly 95 percent of the entire enrollment in the school. During the past year the students have banked \$2549.56. A total amount of \$123 was received from 290 students yesterday.

Washington P. T. A. Thanks Record-Herald

Record-Herald, California. Gentlemen:—The Washington Parent Teachers wishes to thank the Record-Herald for the cooperation and the many courtesies extended them in the past year.

Point Aid To Hold Food Sale

A food sale will be conducted at 158 Washington street tomorrow morning under the auspices of the Point Baptist Ladies Aid. The committee is composed of Mrs. Henry Morelli, Mrs. Charles Forbes, Mrs. Richard Spierich and Mrs. Charles Pearce.

Guard To Hold Social Evening

Plans for a social evening to be held in conjunction with the American Guard auxiliary, were made at a meeting of the Guard in the Brotherhood hall last night. The meeting was followed by a social evening, with card games.

F. B. Juniors Will Hold Drive

Plans for a membership drive were inaugurated at a meeting of the F. B. Junior lodge in the Woodmen hall last night. The drive will end July 4, the birthday of Mrs. Neidig, state superintendent of the juniors.

Rough Dry Service

Bundle returned dry, sweet and clean; flat pieces ironed and wearing apparel starched where necessary. Wearing apparel 5c each piece. Flat pieces priced by the piece.

Minimum 65c

All our washing is done in accordance with the formula scientifically worked out by the American Institute of Laundering Research Department, of which we are a member.

Richmond Steam Laundry Co.
626 Ripley Avenue—Phone Rich. 612

Soloist Has Sweet Dreams

LONDON.—While a violinist at the Palace Theater was gently playing, "Ever I am Fondly Dreaming of You," Miss Barbara Sneed, a pretty dancer in the "Dear Love" company, lost her balance and fell on the violinist's laid head.

Europa's Master Refuses Beer

NEW YORK.—Nicolas Johnson, skipper of the record-breaking trans-Atlantic German liner Europa, never drinks beer. Born of Frisian parents, near Schleswig-Holstein, he has passed most of his life on the sea. The Frisians are a tea-drinking race, noted as seafarers since the seventh century.

Hazards Of Pie Eating Told

PROVIDENCE, R. I.—The perils of partaking of pie were demonstrated in court here recently when Catherine Higgins was awarded \$100 damages. While eating a piece of pie she had been stung by a bee which had concealed itself under the crust.

Small Tip Has Untimely End

LONDON.—It was stated at the inquest on Ronald Garland, a waiter in a west end cafe who committed suicide, that he was despondent with the tip he received from a party of five diners.

Young Love



EDDIE QUILLAN, youthful movie star and his leading lady, Sally Starr as they appear in Eddie's latest picture, entitled "Night Work."

Blistered Feet Cost \$75,000

CLEVELAND.—Seventy-five hundred dollars for a pair of blistered feet is too much, Common Pleas Judge Samuel Kravner ruled when he dismissed the suit of Henry H. Dubbs, filed because a shoe merchant sold him shoes that hurt his feet.

When it becomes necessary to remove the cover plate to lubricate the mechanism of the vacuum wind L. G. Evans, general service, man-shield wiper, be certain that the aser, National Automobile club.

Reds To Have Special Cells

TOKYO.—Fifteen men convicted in connection with the so-called Communist plots of March 1928 have been transferred from the Shikoku prison to the Takamatsu prison for incorrigible criminals. Special single cell's have been built for the Reds.

Mining Man's Ashes Buried

YUMA, Ariz., June 5.—UP.—The ashes of W. M. Neal, Yuma mining engineer who committed suicide in San Francisco, May 23, were buried on the Arizona desert today, in accordance with Neal's last wishes. Burial was in the silver district, 30 miles from here. A simple rock mound was erected on the grave.

Billing Case To Be Acted On Soon

LOS ANGELES, June 5.—UP.—Chief Justice William H. Waste announced today that while the state Supreme Court hopes to complete before the end of June their action on the request of Warren K. Billings for a recommendation for a pardon, the body is not ready to act at present.

Mendocino County Picnic On June 8

The annual picnic of former residents of Mendocino county is to be held Sunday June 8 at Mosswood park. A number of Richmond people who formerly resided in Mendocino county are planning to attend. Everyone is requested to bring his lunch and enjoy the picnic among old friends.

Johnson Bill Hit By S. F.

SAN FRANCISCO, June 5.—UP.—The board of directors of the San Francisco chamber of commerce today voted opposition to the Johnson bill now before the House of Representatives which proposes that immigration quota regulations should be applicable to Latin American countries.

The ground was taken on the grounds that "it would reflect itself unfavorably in American trade relations with those countries and furthermore that there is no necessity for such regulations." For the reason the board voted opposition to the Harris bill in the Senate which would apply a quota to Mexican immigration.

Miramar Chapter To Meet Tonight

Miramar Chapter, O. E. S., will meet tonight at Masonic hall with Mrs. Bertha Terry, worthy matron and Mrs. Martha Alstrom, associated matron, officiating. A business meeting will be followed by a social, and the evening will be concluded with cards and refreshments. All friends of the Eastern Star are requested to attend.

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E. M. TILDEN, President
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Yards: Berkeley, Richmond, Crockett

PRICES SHATTERED PRICES

Sale Specials for Today and Saturday Only!

Schrader's Great Removal Sale

Merchandise is selling fast in Schrader's Great Removal Sale. Never before has our store shown such activity. And all the more because of this successful start, we are slashing the prices on certain important articles and offering them for sale TODAY and SATURDAY, ONLY at the "SPECIAL SALES PRICES" shown herewith. Buy while you have the opportunity, as Monday the prices on whatever is left will be placed back at "REMOVAL SALE PRICES" . . . low enough, it is true, but why not get the greatest value for these two days?

Bridge and Floor LAMP SHADES REMOVAL SALE PRICE \$1.00 SPECIAL SALE PRICE 69c	CUPS AND SAUCERS Special Sale Price 9c	Extra Special THREE-PIECE JACQUARD Chesterfield Set Carved Base and Arm Rests REMOVAL SALE PRICE \$127.50 SPECIAL SALE PRICE \$93.50
32-Piece Set Dinnerware THREE PATTERNS REMOVAL SALE PRICE \$9.50 SPECIAL SALE PRICE \$6.75	WATER SETS Special Sale Price 49c	Folding Camp Cots NOW IS VACATION TIME REMOVAL SALE PRICE \$3.95 SPECIAL SALE PRICE \$2.95
9 x 12 Seamless Axminster Rugs REMOVAL SALE PRICE \$27.50 SPECIAL SALE PRICE \$23.95	COOKIE JARS Special Sale Price 59c	25-lb. Top Icer Refrigerator REMOVAL SALE PRICE \$15.50 SPECIAL SALE PRICE \$12.50
Card Tables REMOVAL SALE PRICE \$1.49 SPECIAL SALE PRICE \$1.19	BOOK ENDS Special Sale Price \$1.00	Sofa Cushions REMOVAL SALE PRICE \$3.95 SPECIAL SALE PRICE \$2.95
8 x 12 SEAMLESS EXTRA HEAVY Removal Sale Price \$46.50 SPECIAL SALE PRICE \$41.50	8.3x10.6 SEAMLESS Extra Heavy Removal Sale Price \$40.75— SPECIAL SALE PRICE \$35.75	8.3x10.6 SEAMLESS HEAVY Removal Sale Price \$39.75— SPECIAL SALE PRICE \$34.75
8.3x10.6 SEAMLESS HEAVY Removal Sale Price \$34.50— SPECIAL SALE PRICE \$29.95	8.3x10.6 SEAMLESS Removal Sale Price \$29.75— SPECIAL SALE PRICE \$22.75	

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Richmond's Leading Homefurnishings Store . . . Since 1904
COURTEOUS CREDIT WILLING SERVICE

Never Before
Never Again
Such Prices
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BUY NOW!

Hurry before
it is too late!
We are selling
this stock to
make room!

KALIFORNIA

TODAY and TOMORROW

You'll Howl and Roar when he Talks and Clowns...

Buster Keaton

"FREE AND EASY"

ANITA PAGE • MONTGOMERY WILLIAM HAINES • KARL DANE

It's better than a tour through the Studios!

Cartoon "Roman Punch"

CHARLIE CHASE in "Fifty Million Husbands"

—BUY FOX WEST COAST SCRIP BOOKS—

FREE, EASY TELLS OF MOVIES

Something new in the way of an all-star comedy satirizing the making of talking pictures is offered in Metro Goldwyn Mayer's farce, "Free and Easy" which will be shown today and tomorrow at the Fox-California theater.

Not since "Show People" King Vidor's laughing expose of the inside workings of Hollywood studios in which William Haines and Marion Davies were co-starred some time ago, has there been a picture 90 percent of whose locale is laid within the closely-guarded portals of the cinema industry.

Players Take "Beating"

According to studio gossip, the players of "Free and Easy" underwent no little "punishment" during the making of this comedy, the various sequences requiring more than the usual falls and slap stick routine seen in the average comedy. Karl Dane, for instance, had to permit himself to be blown up by a charge of dynamite; Trixie Friganza is the occupant of a dirigible whose bottom falls out after it has risen from the ground; Robert Montgomery is knocked out in a "free for all" while Buster Keaton falls off a moving train and in a rehearsal scene is mauled about by eight huge women in the manner of a punching bag.

The song numbers of the comedy include a duet by Robert Montgomery and Lottie Howell called "It Must Be You" a comedy number, "Oh King, Oh Queen" by Keaton and Miss Friganza, and two solos, "Free and Easy" and "Down in Arkansas" sung and danced by Keaton.

The plot of the picture deals with the attempt of a Kansas beauty prize winner to enter pictures, but before the story is ended it turns out that the entry doesn't even get a voice test while her hefty mother and her bumbling manager both get started on their way to screen success.

Also on the program is Charlie Chase in "Fifty Million Husbands" a comedy riot.

Price Reduction At Black's

Suits, Coats and Ladies Dresses, Cleaned and pressed **\$1.00**

1309 Macdonald Ave. Telephone Rich. 723 WE CALL AND DELIVER

LEGAL NOTICES

NOTICE OF PROBATE OF WILL

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF CONTRA COSTA.

In the Matter of the Estate of CARL O. ENGBERG, also known as CARL ENGBERG, Deceased.

NOTICE IS HEREBY GIVEN, that Monday, the 9th day of June, A. D. 1930, at 10 o'clock A. M. of said day, and the Court of said county, at the Court House in the County of Contra Costa, have been appointed as the time and place for proving Will of said Carl O. Engberg, also known as Carl Engberg, deceased, and for hearing the application of Lovisa Engberg, Testatrix, to her of Letters, Testamentary.

Dated, Martinez, May 28, 1930.

JOHN MOORE, Esq., Attorney-at-Law, 908 Macdonald Ave., Richmond, California, Petitioner, J. H. WELLS, Clerk, By L. R. GEYER, Deputy Clerk. (Endorsed) Filed May 28, 1930. J. H. Wells, Clerk, By L. R. Geyer, Deputy Clerk. Publish May 29 to June 8.

PAINFUL CORNS

Loosen—Lift Out

A little known Japanese herb, the discovery of an eminent German scientist (Dr. Stuckel) instantly soothes the corn, callous or wart, then loosens it so that slightly you can lift it right out. This new discovery called "Corn-Fly" excites the white blood corpuscles to action and granulates the corn at its root so that it drops out and leaves no trace of scar or soreness.

You will also find "Corn Fly Foot Bath Powder" a boon for sore, tired or perspiring feet.

"Corn Fly" for corns, 35c, "Corn Fly Foot Bath Powder" 25c, and "Corn Fly Bunion Remedy" 50c, all three—\$1.10 value—for \$1.00, are sold under a positive money-back guarantee by Hi-Gene Co., Newark, N. J., or local druggist.

Got a COLD?

At the first sign of a cold or sore throat, gargle with full strength Listerine. These ailments are caused by germs, and Listerine kills germs in 15 seconds.

LISTERINE

KILLS GERMS IN 15 SECONDS

It's Buster



BUSTER KEATON is starred in "Free and Easy" which is now being shown at the Fox California theater.

RADIO

7:00 to 8:05 A. M.
KPO—Morning exercises.
KFCR—Seal Rocks; Stock quotations.
KFWI—7:30 Health exercises.
KJBS—Alarm Clock.
KLX—Morning Market.
KQW—7:30 Program.
KGO—7:30 Chanticleers.
8 TO 9 A. M.
KPO—Shell Happy Time.
KGO—Financial Service; Chanticleers; 8:30 Cross-outs.
KTAB—Tavern Cryer; Master's Album.
KJBS—Records.
KFCR—Columbia Revue; stocks.
KLX—Jean Kent.
9:00 TO 10:00 A. M.
KPO—Announcements; 9:30 Walter W. Cribben's Daily Chat.
KFCR—Yonge's Band; 9:30 Feminine Fancies.
KTAB—Prayer and talk.
KFWI—Cal King.
KJBS—Records.
KGO—Meet the Folks; 9:30 Home Services.

10:00 TO 11:00 A. M.
KPO—Walter Gribbens; 10:30 Women's Magazine.
KFCR—Feminine Fancies; 10:30 Wyn's Chat.
KGO—Du Barry talk; 10:15 Food talk; 10:30, Woman's Magazine.
KFWI—Records; health talk.
KTAB—Household hour.
KLX—Stocks, weather.
KJBS—Records.
11:00 TO 12:00 P. M.
KPO—Hints for Housewives; 10:30 Woman's Magazine.
KFCR—Columbia Ensemble; educational features.
KGO—Woman's Magazine; 11:30 organ recital.
KLX—Feature hour.
KTAB—Studio program.
KJBS—Sunshine hour.
KQW—Records.
KJBS—Vocal and instrumental.

12:00 TO 1 P. M.
KPO—Time signals broadcast; Scripture readings, announcements.
KFWI—Variety.
KJBS—Program.
KTAB—Studio program.
KFCR—Sherman Clay & Co. concert.
KLX—Time, Hawaiians.
KJBS—News records.
KGO—Pacific Feature hour.

1:00 TO 2:00 P. M.
KPO—Commonwealth club.
KGO—Rembrandt trio; 1:30 St. Francis orchestra.
KLX—Hi Lights.
KFWI—Country Store to 1:30.
KTAB—Chapel Chimes; 1:45, Gleam Chasers.
KJBS—Records.
KFCR—Captivators; 1:45 Three Misses.
KFWI—1:30, Features.

2:00 TO 3:00 P. M.
KPO—Stock quotations; baseball broadcast.
KGO—Black and Gold orchestra; KJBS—Lucille Gordon Players.
KTAB—Records; 2:40 baseball.
KLX—Records; 2:40 Oakland baseball.
KFCR—Happy Go Lucky hour.
KJBS—Records.

3:00 TO 4:00 P. M.
KFWI—Program, Watch Tower.
KPO—Baseball.
KGO—Records.
KJBS—Records; 3:30 Restful hour.
KTAB—Baseball.
KLX—Baseball.
KFCR—Dance Carnival, CBS.
KGO—Universal Safety Series; 3:30 Matinee; 3:45, news.
KJBS—Cabbages and Kings.
4 TO 5 P. M.
KPO—Baseball; 4:30 Children's hour.
KTAB—Baseball.
KLX—Baseball; 4:30 Organ recital.
KFCR—NH WH hour; 4:30 U. S. KJBS—Shirley Dale, records.
KJBS—Sunset Hour.
Army band.
KGO—Chiffes Service concert.
KPO—Big Brother Paul Paman's Children's Hour.
KFCR—Revue; 5:30 Novelties.
KGO—Interwoven pair; 5:30 Arm-mour hour.
KTAB—Brother Bob's Frolic.
KLX—Children's Hour; 5:30 Edgar Russell.
KQW—Sunshine hour.
KJBS—Records.

5:00 TO 6:00 P. M.
KPO—Big Brother Paul Paman's Children's Hour.
KFCR—Revue; 5:30 Novelties.
KGO—Interwoven pair; 5:30 Arm-mour hour.
KTAB—Brother Bob's Frolic.
KLX—Children's Hour; 5:30 Edgar Russell.
KQW—Sunshine hour.
KJBS—Records.

6:00 TO 7:00 P. M.
KPO—Re Masters of Music.
KFWI—Dinner Hour Variety.
KTAB—Studio concert; 6:30 Chapel of Chimes.
KLX—Concert trio.
KFCR—Quakers; 6:30 Fast Freight.
KGO—Quakers; 6:30 Ra'leigh Revue.
KJBS—Records.
KJBS—Records; Metro Cosmo.
7 TO 8 P. M.
KLX—News, program; Melody Man.
KQW—Farm news.
KPO—North American dance band.
KFCR—Biltmore band; Heywood Brown.
KGO—Elgin program; 7:30 Amos n Andy; 7:45 Concert favorites.
KTAB—Artist Novelties.
KJBS—George Taylor; "1640 Boys" KFI—Vocal Recital.

8 TO 9 P. M.
KPO—Caswell's Musical Episode; 8:30 "Out West."
KGO—Ole and Girls; 8:15 Piano Paintings; 8:45 Tone Pictures.
KFCR—Veelod Vodyl; 8:30 Novelties.
KTAB—Miniatures.
KLX—High Jinx Frolic.
KQW—Program.
KJBS—Calendar of Air.
KFWI—8:30 Hawaiians.
KFI—Dance band.

9:00 TO 10:00 P. M.
KPO—Meeting at Tavern; 9:15 Maurice Gunksky; 9:30 Packard program, KFI.
KGO—Tone Pictures; 9:15 Eastman Week-end; 9:45 John and Ned.
KTAB—Melody quintet.
KFCR—True Story Hour.
KLX—Hi Jinks.
KJBS—Orchestra.
KFI—Three Co-eds, orchestra.

10 TO 11 P. M.
KPO—Time signals; dance orchestra.
KLX—Fleur de Lis orchestra.

FEDERAL FUNDS WILL PURCHASE COTTON

WASHINGTON, June 5.—UP—Formation of a cotton stabilizing corporation to relieve the existing emergency situation through the purchase of millions of bales of the surplus cotton with federal funds was announced today by the federal farm board.

Establishment of such a corporation similar to that now in existence for wheat, was recommended by the cotton advisory committee, a body comprising seven leading cotton growers and authorities headed by Bradford Knapp, president of the College of Agriculture, at Auburn, Ala. In the opinion of the committee there is an emergency in the American cotton market which calls for invoking the full power granted the farm board under the agricultural marketing act. Articles of incorporation for the new non-stock corporation to be known as the Cotton Stabilizing Corporation, were filed today at Wilmington, Del.

It was indicated at the farm board that funds probably aggregating as much as \$50,000,000 at low government interest rate will be made available to the stabilizing corporation for use in buying surplus cotton. This is expected to materially aid the depression in the cotton exchanges and clear the way for marketing the 1930 crop.

Organization of a cotton stabilizing corporation means that two such marketing groups, intended only for emergency use as a means of keeping the price stabilized on a normal level, will be active in connection with the 1930 crops. The Grain Stabilization corporation, formed last year, already has approximately 50,000,000 bushels of wheat and is expected to buy more this year unless the wheat prices regain higher levels.

The Cotton Stabilization Corporation will be separate from the American Cotton Cooperative Association, then national marketing body formed by growers with the aid of the farm board and largely financed with government funds. Directions of the new corporation will meet here Monday to formulate plans for operating in the cotton market.

Announcement of the new corporation was expected to be received enthusiastically by cotton growers, who have faced the prospect of having to sell their new crop at prices which would net them little, if any, profit.

Police Hunt

Missing Girl

SAN FRANCISCO, June 5.—UP—A city-wide search was started today by police seeking Miss Leonora Brinegar, who was reported to have gone for a walk early Tuesday and only in an overcoat slipped over her night gown and who failed to return home. It was feared that the girl's mind might have collapsed since an auto accident a few weeks ago.

U. S. School in

Mexico Scored

MEXICO CITY, June 5.—UP—A manifesto condemning as "anti-Mexican" the American school here and urging the expulsion of employees of such "imperialistic" institutions as the National City bank and the Guggenheim Foundation was passed at a meeting of the council of the National university.

KFCR—Cecil Wright; Mark Hopkins band.
KTAB—Organ; 10:30 dance band.
KGO—Mystery serial; 10:30 Pacific Nomads; Lucille Kirtley.
KFWI—Sally Lewis, pianist.
KFI—Concert; Dance band.
11:00 TO 12:00 P. M.
KTAB—Records.
KFCR—Dance band.
KGO—St. Francis dance band.
KFWI—Sherman Clay concert.
KNX—Dance music; features.

Street Girl To End Run Here Tonight

Betty Compson's talent with the violin is one of the interesting features of the all talking, all-musical Radio Picture, "Street Girl," the feature attraction which ends a run today at the Richmond theater.

It is worthy of note that it was her ability as a violinist which launched Miss Compson on a theatrical career when she was a school girl in Salt Lake City, Utah.

Supporting Miss Compson in "Street Girl" a tenebrous romance of New York's "Little Hungary" are John Harron, Jack Oakie, Ned Sparks, Joseph Cawthorn, Ivan Lebedeff and Guy Buccola.

The many entertaining features of "Street Girl" include the tuneful rendition of Gus Arnheim's Cocomat Grove Ambassadors; the vocal numbers of Raymond Mauriel, operatic baritone; the dance numbers of Doris Eaton, musical comedy star, and a Hollywood beauty chorus; and four original songs by Oscar Levant and Sydney Clare, famous Broadway songs writing team.

Cannery Co. To Move Offices Here In Future

With the opening of the Felice and Perrelli cannery scheduled for the latter part of this month, the office forces and other employees of the cannery at Gilroy are preparing to move to Richmond, according to word received from Miss Gladys Dreyfuss, formerly of Richmond, and now employed in the cannery office at Gilroy.

Miss Dreyfuss wrote that many employees of the cannery were coming to Richmond Sunday to seek homes.

BIRTHS RECORDED

According to reports filed with the Richmond City Health department yesterday, four new babies were born in Richmond on June 1. Five birth records were placed on file.

To Mr. and Mrs. Fred Vesdieker of Richmond, a daughter, born on May 28.

To Mr. and Mrs. William Dennis, 170 Second street, a daughter, born on June 1.

To Mr. and Mrs. Grant Newman, 1930 Burbank avenue, a daughter, born on June 1.

To Mr. and Mrs. Antonio Martinez, 108 Maine avenue, a son, born on June 1.

To Mr. and Mrs. John B. Mayer, 5201 Esmond avenue, a son, born on June 1.

San Pablo Man Pays \$200 Fine

MARTINEZ, June 5.—Unable to pay a fine of \$200 for reckless driving, H. E. Grasser, 43 of San Pablo was in the county jail today, following his appearance before Justice of the Peace Frank Glass. Unless the fine is paid, Grasser will be forced to remain in jail 200 days.

ARTHUR A.

ALSTROM

(Incumbent)



Attorney-at-Law
CANDIDATE FOR

Justice

OF THE
Peace

(Richmond)
Primary Election
August 26, 1930.

JOHN

MOORE



Attorney-at-Law
CANDIDATE FOR

Justice

OF THE
Peace

(Richmond)
Primary Election
August 26, 1930.

You can do better at the Ashby.

INTERIOR DECORATIONS AND HOME FURNISHINGS

Our New Telephone Number is OL 5-5000

The Ashby

FURNITURE CO.

ADRIENNE and ALCAZAR

ARMSTRONG'S LINOLEUM

Makes housework easy when laid CLIM-ER-EDGE way.

WINDOW SHADES

All Kinds — All Colors

Allowance on Old Rollers

E. C. CRANE

The Service Shop

2211 Macdonald Ave.

Telephone Richmond 477

Pay Your Indebtedness This Easy, Convenient Way

If you owe a Doctor, Dentist, Lawyer, Broker, or local merchant a sum of money, arrange to have their indebtedness transferred to our Character Loan Department. Sign a promissory note for the full amount of your indebtedness. Your creditor can then discount the note, receive full payment in cash from our bank, and you can repay the note to us in small monthly payments.

This is an easy and convenient way for you to free yourself from indebtedness. We feel that this new service will be welcomed by professional men of our community, and the charges for your loan are exceptionally low.

Full and complete details can be had in person or by telephone from any officer of our bank and at any of our three offices.

Character Loan Department

The Mechanics Bank

"Richmond's Bank of Courtesy and Service"

RICHMOND, CALIFORNIA

Three conveniently located offices in Richmond and El Cerrito

Simple to Open Convenient to use

Caswell's

NATIONAL CREST

COFFEE

AN ORDER BY TELEPHONE WILL BRING PROMPT DELIVERY

Telephone

Richmond 110

Automatic Electric Coffee Roasting Accomplished by the GEO. W. CASWELL CO.

BISHOP CANNON WALKS OUT ON SENATE

WASHINGTON, June 5.—UP—A gray-haired man deliberately picked up his crutch, hat, and brief case today and marched out of the Senate lobby investigating committee room while a member was addressing him.

The unprecedented action was that of Bishop James J. Cannon of the Methodist Episcopal church, South. He challenged the committee to subpoena him and left, as the audience gasped and Sen. Blaine R. Wis. was reading a report upon which he was about to question Cannon. "Plain contempt of the Senate," commented Acting Chairman Thomas J. Walsh, dry Democrat from Montana, later.

Not Delayed
The question of possible prosecution was postponed for several days until the return of Chairman Caraway. Walsh adjourned the committee until Wednesday, noting that Caraway, who asked Cannon to appear, would return Tuesday from his trip to Arkansas to deliver a commencement address. Later a United Press dispatch from St. Smith Ark., said Caraway had canceled all engagements and was returning to Washington at once.

Other experts than Walsh, however, viewed the legal situation as more complicated, due to the presence of only two committee members, which is less than a quorum, during Cannon's walkout. Some Senators believe additional authority would be necessary to make compulsion against Cannon effective. Doubt was expressed that the Senate would permit a sweeping investigation which conceivably would go deep and far back into the undisclosed record of the 1928 Hoover-Smith campaigns.

Cannon's defiance was marked by a renewal of his charge that he is being persecuted by "wet and Roman Catholic elements which are trying to prevent a recurrence of Asheville in 1932." He referred to the conference of southern anti-Smith Democrats which he called to meet at Asheville shortly after Governor Smith's nomination to formulate a campaign against the nominee—a campaign credited with swinging four "solid South" states to the Hoover column in the election.

Walks Out
"I shall now withdraw as a voluntary witness," the bishop said quietly. He rose in his chair and started picking up his papers. A ripple of applause arose from the audience. Cannon also charged that the committee was discriminating in its investigation of him while it neglects the Democratic campaigners, particularly those who worked among the Negroes for Smith's candidacy.

Walsh replied that if Cannon had information involving lobbying by the organizations he mentioned, the committee would take it under advisement and "seek to discharge its duty."

"I shall retire," Cannon replied. "We have not excused you," Walsh said, "and without going into your status as a witness, you are here and under our jurisdiction. We recognize also that your purpose in this action is to criticize the committee."

Blaine began to read aloud some of the correspondence on which the inquiry was based, as Cannon, holding his crutch and his hat in one hand and his brief case in the other, started out.

"Shall we stop him?" asked Blaine. A policeman was in the room, watching for a motion from the committee-members present.

"No, let him go," Walsh replied.

At Home
Cannon told Walsh he would be available in his combined office and home at the B's building, also occupied by the anti-Saloon league, facing the capitol, but no effort was made by the committee to subpoena or arrest him. Anti-Saloon League Superintendent Scott McBride was among the spectators.

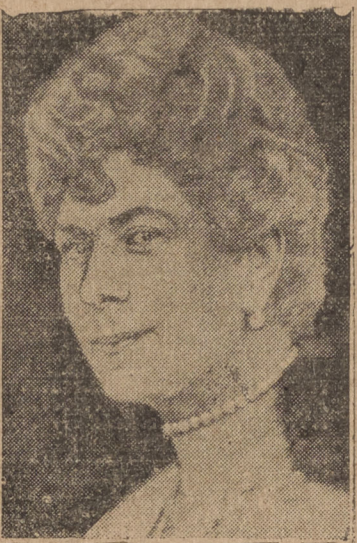
Two minutes after he left, Senator Borah, Rep., Idaho, walked into the room, providing the committee with a legal quorum for the first time since Cannon went on the stand Tuesday.

Honor Society



THESE ARE members of the Honor Society of the Richmond Union High school. Students who have high grades in their work are included in the society.

Birthday



QUEEN MARY of England, celebrated her 63rd birthday recently. Her two grandchildren presented her with many gifts.

Woman Publishes English Paper

HOLYOKE, Mass.—Mrs. William G. Dwight, is believed to be New England's only woman editor and publisher of a daily newspaper. She assumed those positions recently under the will of her late husband, founder and for many years editor-publisher of the Holyoke Transcript-Telegram.

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ELEMENTARY SCHOOL PUPILS TO GRADUATE TO JR. HIGHS

Pupils of the Richmond elementary schools 214 in all, will be graduated into the Roosevelt and Longfellow junior high schools at the semi annual exercises today. Of these, 133 will enter Roosevelt, and 81 will go to Longfellow. The graduates represent pupils from Washington, Peres, Grant, Lincoln, Stege, Nyström, Pullman, Woodrow Wilson, Fairmont and Harding. A seventh grade will be organized at Kensington school at the opening of the fall term, and therefore no pupils will be sent from that school to the junior high school's this year.

Pupils who graduate from the Fairmont and Harding schools have been divided, part being sent to Longfellow and part to Roosevelt. Pupils from Fairmont and Harding who have been promoted to Roosevelt are: Raymond Penpraze, Frank McNally, Lillian Tonelli, Mervin Albert, Grace Addiego, Marjorie Nelson, Trese Painter and Caroline Tonelli.

Pupils from Fairmont and Harding who have been promoted to Longfellow are: Richard Beebe, Charles Covell, Billy Ellis, Howard French, Larry Green, Daniel Groth, Charles Hill, Eugene Jakobson, Jack Leake, Anthony Ormasa, Edward Ponteous, Elmer Randall, John Taylor.

Harold Armstrong, Jack Bates, Lester Cardwell, Elmer Garibaldi, Harold Elineman, Harry Mayoda, Earl McKinley, Edward McLaughlin, Jack Negus, Willie Nelson, Clarence Pickle, Domonick Randetto, Pete Tricca, Francis Vignato, Anthony Wilson, Richard Beebe, Vernon Slater, Joe Moore.

Frances Auzex, Ina Corrigan, Beryl Courtright, Lucille Dodge, Thelma Francisco, Rita Griffith, Alberta Hill, Hazel Kamb, Florence Korb, Peggy Krumdick, Laroma Lundel, Georgia Mayer, Ruth McElroy, Mary McVittie, Ruth Minner, Marian O'Brien, Dorothy Poole, Patricia Radke, Ardene Soward, Dorothy Vigilone, Margaret Hofer, Rose Barick, Lois Berry, Florence Casson, Barbara Fairbanks, Ruth Frazier, Sylvia Geriotti, Ethel Hoehn, Melvina Joy, Angelina Kalegas, Michiko Mabuchi, Marguerite McCorm, Lella McLennan, Martha Miyamoto, Alice Moore, Virginia Murphy, Hannah Oishi, Ellean Owens, Frances Wilson, Ora Brown.

The following are the students who will graduate from the different elementary schools to Roosevelt: Allen Beck, Peter Callegari, Leo Costa, Robert Dommes, Harold Felciano, John Healy, William Koopman, Edward Lasaten, George Mason, Milo Milicevich, Edward McMullin, Lloyd Moore, Glen Nylan.

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INSURANCE BROKER
YOUR EVERY INSURANCE WANT CARED FOR
BURG BUILDING Phone Richmond 730-731 332 23rd Street Richmond, Calif.

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STANDARD OIL PRODUCTS
Joe's Super Service Station
14th and Macdonald Avenue Phone Richmond 1456

Herbert D. Baker
HOUSE MOVER
phone Richmond 52
17TH ST. AND GAYNOR AVE. RICHMOND, CAL.

CUBS CONTINUE WINNING STREAK

By UNITED PRESS

NATIONAL LEAGUE—Chicago's reputedly "crippled" Cubs continued their heavy hitting Thursday, defeating the Boston Braves, 10 to 7 and strengthening their hold on second place. The Cubs now are only two games behind the league leading Brooklyn Robins, with whom they open a four game series tomorrow.

A great throw by Captain Glenn Wright in the ninth inning cut off the tying run at the plate and gave the Brooklyn Robins a 6 to 5 victory over Pittsburgh.

Joe Genewich pitched New York to a 7 to 4 victory over Cincinnati, the Giants advancing to a tie with Pittsburgh for fourth place. Genewich held the Reds to six hits, and Hughie Crits' homer with Genewich on base gave the Giants the winning runs.

Philadelphia made 14 hits behind the excellent pitching of "Hay" Collard to win the deciding game of a three game series from the St. Louis Cardinals, 10 to 4.

St. Louis' five run rally in the ninth ended the Philadelphia Athletics' ten game winning streak, but the Macks held first place by a single game because the second place Washington Senators dropped a 6 to 2 decision to Detroit.

Stone led a 11-hit attack on Sad Sam Jones, ace of the Washington pitching staff, and Detroit defeated the Senators, 6 to 2. Stone connected for a double, triple and single in four times at bat.

Cleveland pounded Milton Gaston and Smith for 25 hits to defeat the Boston Red Sox, 17 to 7. The Indians opened the game with a nine run attack, battling around before a man was retired and continued their heavy hitting throughout the game. Clint Brown pitched for the Indians allowing only nine hits.

The New York Yankee-Chicago White Sox game was called at the end of the second inning on account of rain, with the score tied at 1-1.

Health Center Makes Report

The monthly report of the Richmond Health Center clinic revealed that 604 patients visited the clinic during May, and 379 persons received dressings and treatments not included in the clinics.

Mrs. Nora I. Purviance, director, declared that 24 new cases have been reported, and seven county hospital cases and six local hospital cases have been handled.

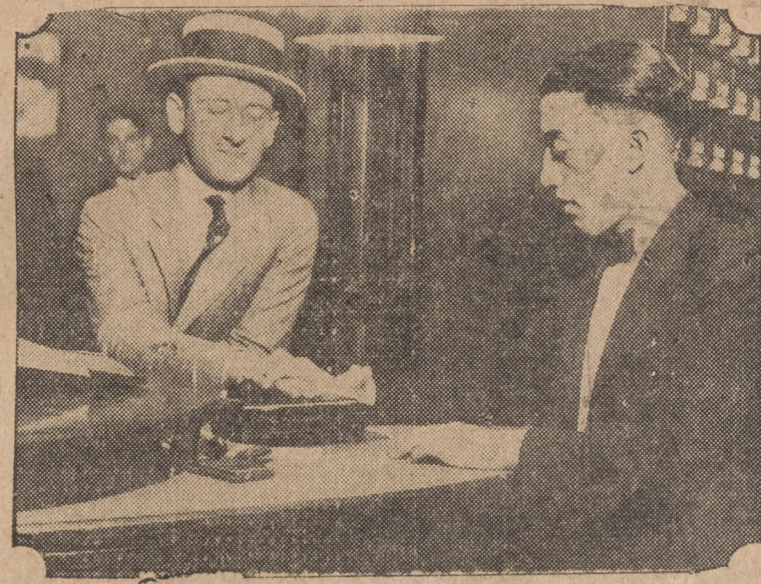
Sutliff Funeral This Afternoon

Funeral services for William Sutliff, watchman at the Standard Sanitary plant, who was killed in an accident Monday night on San Pablo avenue, will be held from the Wilson and Kratzer chapel at 1:30 this afternoon. Interment will follow at the Sunset View cemetery.

The Richmond Brake Shop

1408 Macdonald Ave.
Every Type of Brake Lining for Every Type of Brake
RAYBESTOS
Wheel Alignment and Brakes
Phone Rich. 2775

Fingerprinting



A NEW YORK city bank has so many depositors who cannot sign their names that when withdrawing their money they leave their fingerprints instead of money.

Portland Takes Second Win Over Sacramento Team

SAN FRANCISCO, June 5.—UP—The amazing upsets being produced by Seattle and Portland, last place teams of the Pacific Coast league, continued today and if they are repeated Friday the Los Angeles Angels might pass the league leading Sacramento Senators.

Portland's Beavers, who sent Oakland from second to fourth last week, gained their second straight victory over Sacramento today, 5 to 4, while the Angels were making it three straight over Hollywood by a score of 13 to 4. Seattle brought Oakland out of a tie with the San Francisco Seals for third place with a 6 to 2 win because the Seals were beating the San Francisco Missions, 8 to 7.

Five singles, three base on balls and a wild pitch gave the Seals seven runs in the seventh inning to beat the Missions.

A ninth inning rally in which two runs were scored was responsible for Portland's win. After five innings of scoreless baseball, the Indians made five runs in the next two innings to clinch the contest. Los Angeles beat Hollywood with five runs in the first inning.

Advice On Assembling

Concentrate on the dismantling of any pieces of machinery, so that no difficulty will be encountered in re-assembling the parts, is the suggestion offered by the National Automobile club.

Robins Defeat Pirates In 3rd

ST. LOUIS, June 5.—UP—A battling onslaught of six hits in the last of the ninth, bringing in five runs, gave the St. Louis Browns a 6 to 5 victory over the Philadelphia Athletics in the third game of the series today.

It was the first defeat for the A's in eleven starts. Rube Walberg, after holding the Browns to five hits and one run in the first eight innings, weakened in the final, and was touched for two singles and a double before being relieved by Jack Quinn. The Browns then went at Quinn for three more hits, the final a single by Kress scored Blue with the winning run.

Alvin Crowder was touched for nine hits, the Athletics bunting them for their runs.

California's share of Federal Aid funds would be increased from \$2,500,000 a year to \$4,200,000 annually if the proposed increased appropriation is approved by Congress, according to the California State Automobile association.

FAT MEN! How Much Overweight Are You?

Average Weight of Men With Clothes		Feet and Inches of Height With Shoes									
Feet	Inches	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
5 ft.	4 in.	131	135	138	140	143	144	145	145	145	145
5 ft.	5 in.	134	138	141	143	146	147	149	149	149	149
5 ft.	6 in.	138	142	145	147	150	151	153	153	153	153
5 ft.	7 in.	142	147	150	152	155	156	158	158	158	158
5 ft.	8 in.	146	151	154	157	160	161	163	163	163	163
5 ft.	9 in.	150	155	159	162	165	166	167	167	167	167
5 ft.	10 in.	154	159	164	167	170	171	172	172	172	172
5 ft.	11 in.	159	164	169	173	175	177	177	177	177	177
5 ft.	12 in.	165	170	175	179	182	183	183	183	183	183
5 ft.	1 in.	170	177	181	185	188	189	189	189	189	189

There's a new and easy way to gain in energy, vigor, ambition and health. And at the same time lose the fat you don't need and don't want. Take a generous half teaspoon of Kruschen Salts every morning in a glass of hot water — don't miss a morning, but don't take them with the idea that they possess reducing qualities in themselves.

This is what they do—they clean out the impurities in your blood by keeping the bowels, kidneys and liver in splendid working shape and fill you with a vigor and tireless energy you'd most forgotten had existed.

A jar that will last you a month costs but 86c at LaMoine Drug Co., or any drugstore anywhere in the world.

When the jar is empty get on the scales and see how many pounds you have lost — after that you'll tell your friends that Kruschen Salts is worth one hundred dollars of any fat man's money.

After you have had your daily supply of Kruschen every morning for a couple of weeks, you'll get what is known in Great Britain as "that Kruschen feeling."

The urge for activity will fill your entire being — you'll not be content to sit in the old arm chair after your day's work is done.

You'll feel the spirit of youth within you — what a joyous feeling — you'll want to take long walks, play games and your work will cease to be a hardship — it will become a pleasure.

Your old time ambition will return — you'll arise early filled with the joy of living — no grumbling at the breakfast table — your keen appetite will cause you to relish everything that's put before you.

For Kruschen Salts — not one salt mind you — but the six vital salts that Nature says your body must have if your life is to be a happy, healthy one.

Kruschen Salts will help you to lose fat — it keeps your kidneys, liver and stomach in such good shape that they perform their functions properly, keeping the system free from poisonous waste. Its tonic influence reaches every organ, gland and fibre in the body, bringing good health to all who put their faith in it.

MILL ENDS AND JOB LOTS SALE!

AT THE Princeton Knitting Mills

Twenty-third and Tulare Avenue—Near Richmond Union High School

A clean-up sale of mill ends and job lot sweaters in a large variety of sizes and colors in worsted, silk and worsted, and zephyr at prices below cost of manufacture. This is the first time the Princeton Knitting Mills have ever offered such mill-end bargains. A wonderful opportunity for the people of Richmond to participate in a sale by a home industry.

SALE STARTS TO DAY, JUNE 6TH

Ladies' Sweater Coats

With collars
Sizes 36 to 46

\$2.95 \$4 \$5
\$5.50 and \$6

Girls' Slip-on Sweaters

and sleeveless
Sizes 34 to 42

\$1.50 \$1.65
\$1.95

Men's Slip-on Sweaters

Sleeveless
Sizes 36 to 46

\$2.00

Ladies' SPORT COATS

Sizes 36 to 46

\$2.50 \$4
\$5

Juvenile COATS AND SLIP-ONS

Sizes 26, 28, 30

\$1.50

Boys' Slip-on Sweaters

Sleeveless
Sizes 28 to 36

\$1.50

Infants' 3-PIECE SETS

Sizes 24, 26, 28

\$3.50 Set

Girls' Collar Coats

Sizes 30 to 36

\$2.50

Men's SPORT COATS

Sizes 36 to 46

\$3.50

Boys' Slip-on Sweaters

Sizes 26 to 34

\$1.00

BATHING SUITS

\$1.50 \$1.65

\$2.50

Men's Slip-on Sweaters

Sizes 36 to 46

\$2 and \$3

Boys' KNIT COATS

Sizes 28 to 34

\$2.00

Summer scatters the family

...the Telephone keeps it together

THE family is scattered for the summer. Sally is in the mountains. Tom is on a ranch. Mrs. Williams is at the shore. And Mr. Williams home. . . . But he is in close touch with every member of the family.

He does it by telephone.

It's inexpensive. And talking to them is next best to seeing them.

THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY



FEATURE - NEWS - PICTURES

A Dash Down the Track



CAMBRIDGE, MASS.—Frank Wyckoff of the University of Southern California getting under way in a practice dash down the track at the Harvard Stadium here.

Goose the Size of a Dove



LONDON—One of the three pigmy geese that arrived at the zoo here from Portuguese East Africa. They are the first of their kind ever seen in this country.

Curious Specimens in Arabia



ADEN, ARABIA—The "mermaids," or manatees, curiosities which the British National Museum has offered large sums of money for. The owners, however, consider it their patriotic duty to the Port of Aden, where they were taken, to keep them there.

Donates Trophy Surgeon to King



NEW YORK CITY—Col. A. A. Anderson, who has donated a \$1,000 trophy to be competed for annually by America's junior aviators in a solo flight from Los Angeles to New York.

LONDON—Lieut. Gen. Sir A. Sloggett, surgeon to King George and Colonel commanding the Royal Army Medical Corps.

At the Grave of Her Son in France



This photo shows one of the many American Gold Star Mothers now in France at the grave of her son.

Which One Will Win?

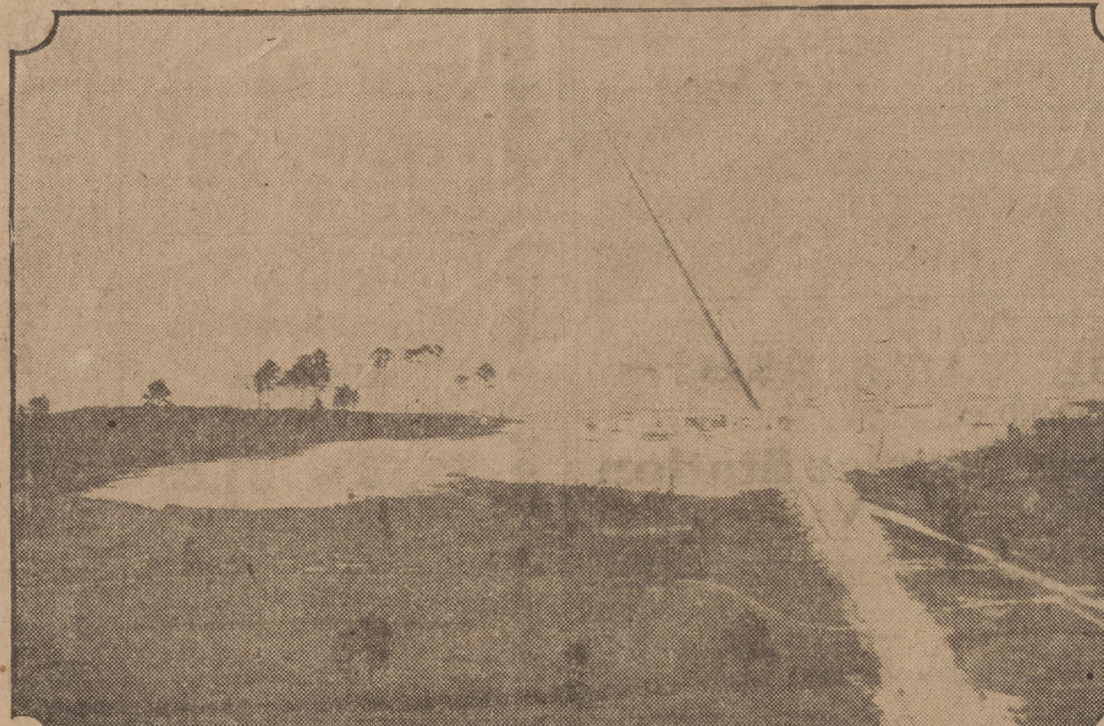


These photos show a good close-up of Max Schmeling, German heavyweight, and Jack Sharkey, who will battle for the heavyweight title on June 12.

President Opens Highway Safety Conference



President Hoover and other prominent men who are attending the national conference on street and highway safety photographed at the Chamber of Commerce of the United States in Washington. Left to right: Thomas P. Henry, President A. A. A.; William Butterworth, President, U. S. Chamber of Commerce; President Hoover, and R. H. Aishton, President, American Railway Association.



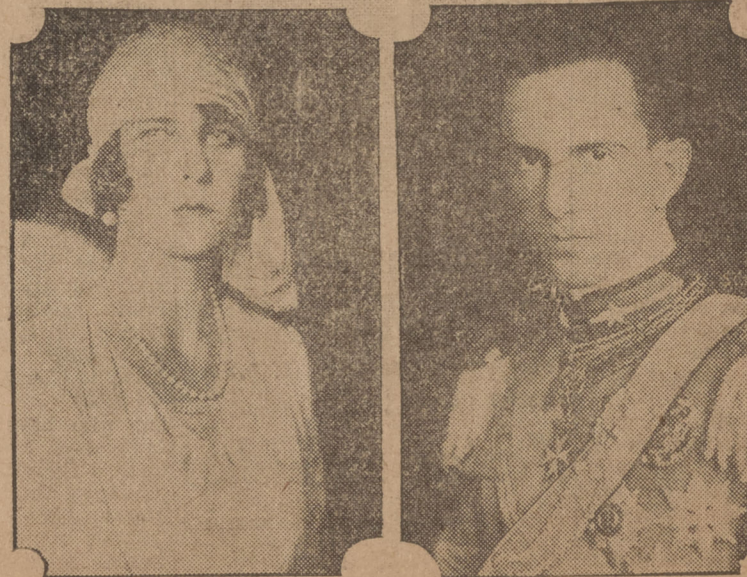
NORFOLK, VA.—The new four and one-half-mile long \$6,000,000 James River Bridge, which opened with a "no speed limit" law a year ago and arrested sightseeing motorists who sauntered over her ribbon-like stretch at less than a thirty-five mile per hour gait, has been obliged to change her traffic laws. Photo shows an air view of the bridge, which leaps across the historic James River.

The First Lady With President



A new photograph from Soviet Russia showing Kallin, the President of Soviet Russia, accompanied by his wife, on a recent tour of the Caucasus.

Future King and Queen



New and exclusive photographs of Princess Marie Jose of Belgium and Crown Prince Umberto of Italy, who were recently married.

Sweet Potato Resembles Seal



LOS ANGELES—Agnetta Van Duzer is displaying a freak sweet potato grown near here that bore a strong resemblance to a seal.

Not Sky-Gazing



NEPONSET, MASS.—Frank Paine, designer of the cup candidate Yankee, on his back, using binoculars to look over the top of the yacht's towering mast.

RECORD-HERALD
Published Every Morning Except Mondays
and the Days Following Holidays by the
Record-Herald Printing and Publishing Co.
202 Macdonald Avenue Telephone Richmond 70 and 71

G. E. MILNES, President and Manager
GROVER E. MILNES, Business Manager

OFFICIAL PAPER OF THE CITY OF RICHMOND

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As Second Class Matter

FRIDAY MORNING, JUNE 6, 1930

CLASSIFIED ADVERTISING RATES
Two Cents Per Word Per Day
Minimum Charge, 35c

Lodge and Meeting Notices

KNIGHTS OF PYTHIAS—Richmond Lodge No. 13, meets every Wednesday night at 8 p. m. in K. of P. hall, 12th St., near Macdonald. Visitors always welcome.
W. H. LONG, C. C.
R. G. BLACKHART, K. R. S.

ST. ANDREW'S SOCIETY—of Richmond and District—Meets second and fourth Wednesdays at 8 p. m. in Richmond Club House. Scottish visitors are always welcome. Pres., Peter MacCallum, 540 12th St., Phone Richmond 1085.
W. B. Bumgarner, physician, 906 Macdonald Ave., Phone Rich. 476.

PL. RICHMOND AERIE No. 334
P. O. E.—Meets every Tuesday at 8 p. m. in W. O. W. hall, Seventh and Macdonald, G. J. Regello, W. P., 1120 Pennsylvania Ave.; W. W. McChristian, Secretary, Phone Richmond 1085.
W. B. Bumgarner, physician, 906 Macdonald Ave., Phone Rich. 476.

LET MAYER DO IT—If you want your old suit made like new, Phone 452. Cleaning, pressing, mending or repairing. All called for and delivered.
W. B. Bumgarner, Cleaning, 1116 Macdonald Ave., 4-11-11

Can You Beat It!

LOOY DOT DOPE

ENOUGH IS ENOUGH... OUT HE GOES... I COULDN'T STAND ANY MORE FROM DAT BOARDER!

I'LL PUT AN AD IN TH PAPER FOR ANOTHER ONE

HELLO DAILY BLUE... SAY I WANT TO INSERT AN AD... BOARDER WANTED... APPLY TO FEITLEBAUM

HEY WAIT A MINUTE... CHANGE THAT TO NURSE WANTED!

KRAFT Velveeta
The Delicious New Cheese Food

Real Estate For Sale

SEE—For Yourself

Some unusually attractive HOMES now under construction in MIRA VISTA are selling before completion.

Satisfy Yourself

before buying how much you may obtain for your money.

M. A. HAYS Company
2216 Macdonald Avenue
Phone Rich. 898 - 899

WATSON'S BARGAINS Never Again

Will you get a buy like this—\$2,350—\$250 Down

Modern, Stucco bungalow of five rooms. Hardwood floors throughout, the sink, English fire place, breakfast nook, Near 23d street.

For the Handy Man
\$1,400—\$150 Down
Good five-room cottage and garage on 50-foot lot. Needs some repairing.

1202 Macdonald Ave.
Phone Rich. 180

Before you RENT LEASE OR BUY

See Mrs. W. H. SANFORD'S list of attractive homes. Prices and locations to suit the individual's needs. Office 2221 Macdonald Avenue Richmond California.
Phone Richmond 927
OFFICE OPEN SUNDAY

Real Estate For Sale

FOR SALE—SACRIFICE—San Pablo lot, 50x120 near Esmond, \$1,000. Owner, 712 Alamo avenue, Oakland. 6-1-61

FOR SALE—FIVE LOTS, ONE block north of Cutting boulevard. Good location. \$750 for the five. Apply H. O. Watson at 1202 Macdonald avenue. 6-1-25

FOR SALE—5 ROOM MODERN house at 759 Twenty-second street, hardwood floors, tile bath room, double garage, lawn, flowers, garden. For a bargain \$8,000 owner on premises. 5-15-31

For Sale—Miscellaneous

FOR SALE—REGISTERED RED-BONE Cockerhounds, 3 months old, \$15.00 each. Males only. Apply 131 So. Second St. 5-23-31

TESTED COW—will be fresh in two days. Phone Richmond 250. 120 South 23rd street. 5-25-31

FOR SALE—APEX, ROTARY AND Johnson washers, ironers, cleaners and dryers. Investigate our easy payment plan. \$1.00 down. Schraders Furniture Co. 5-20-31

COATS, DRESSES, FURS AND fur coats. Factors samples sizes 14 to 64. Huge stock. Dow's Wholesale Rms. 133 Kearney, San Francisco. 5-14-31

By MAURICE KETTER
Copyright Press Publishing Co.

Real Estate For Sale

Now Is The Time To Buy

REAL ESTATE IN RICHMOND

EITHER A HOME OR AS AN INVESTMENT

MACDONALD AVENUE—Is now and will always remain the MAIN BUSINESS STREET. I have several large lots only one, two and three blocks from it on both sides from Sixth and Sixteenth streets. Buy one and I will build a home to suit you—and sell it to you on easy terms, or cheap, for cash. Save time by walking to and from your work. They are sure to increase in value. This kind of property has made the greatest fortunes for many conservative investors.

—A SPECIAL OFFERING—

OWNER having moved old house off of lot 50x112 1-2, it now has gas, water, and sewer mains in front to back; also a good garage. Some fruit trees in the back yard and two large palm trees in front yard. Located on 17th Street, North, 2 blocks from Macdonald avenue. Priced very low, as owner needs the money. Come and let me show you this lot and I will surprise you at the low price.

50x112 1-2—South side of Bissell, between 14th and 15th streets
75x112 1-2—West side of 14th street, near Bissell Avenue.
75x112 1-2—Northwest corner of 14th and Chanslor avenue.
75x112 1-2—East side of 13th, between Bissell and Chanslor.
Fine location for apartment house, or for two residences.

GEO. W. McPHERSON Real Estate—Insurance
Exclusive Agent for the OVERLAND TRACT
318 TWELFTH STREET
RICHMOND, CALIF.

For Rent—Rooms, Homes, Apartments, Flats

FOR RENT—4-room house, garage and basement. Located at 245 Eighteenth Street. 4-26-31

FOR RENT—4 room furnished house including lights, water, garbage. \$25.00. Apply 2129 Bissell. 5-23-31

FOR RENT—FURNISHED TWO-room sunny apartments, 1120 Hearst avenue, Berkeley, near San Pablo. Fashion Arms Apts., Thornwall 6567. 6-1-61

FOR RENT—2 ROOM FURNISHED flat, garage. \$15 per month. 640 Fifteenth St. 6-1-61

FOR RENT—MODERN BUNKY 2 room apartment, nicely furnished, garage. Rent reasonable. Enquire El Carquin Apts., 1401 Barrett, Phone Richmond 1578. 5-21-31

6% ON SAVINGS

Pay book accounts. Withdrawal privileges. Legals. Under State supervision. Resources over \$15,000,000

CALIFORNIA MUTUAL BUILDING & LOAN ASSOCIATION
H. A. Johnston, Mgr. Rich. Office 1025 Macdonald. Tel. Rich. 362

IT'S BAD BUSINESS

Don't offend business and social acquaintances with halitosis (bad breath) when you can eliminate the risk by gargling with Listerine, the safe antiseptic. It destroys odors instantly, checks infection and improves mouth hygiene. Lambert Pharmaceutical Company, St. Louis, Mo., U. S. A.

LISTERINE ends halitosis

Kills 200,000,000 germs

This new cheese treat

Kraft Velveeta
Digestible as milk itself!

Now—Kraft-Phenix new achievement! Rich mellow cheese flavor plus added health qualities in velvety, digestible form. Velveeta retains all the valuable elements of rich milk. Milk sugar, calcium and minerals. Every one can eat it freely!

Velveeta spreads, slices, melts and toasts beautifully. Try a half pound package today.

Real Estate For Sale

Paulsen's TIPS!

THOSE LAST BARGAINS WENT QUICKLY—Here are more that you should investigate. Unquestionably this is the time to buy real estate. We believe in TRUTH in advertising.

8 ROOM HOUSE—We have beautiful new home in Mira Vista, 3 bedrooms, large kitchen, all modern conveniences. Up to date. Basement, furnace, garage. Large lot. Fine view. Will take 10 of building lot or bargain for cash.

ANOTHER REAL TIP—GOOD HOME—\$3,700. 2 large bedrooms, living room, kitchen, large breakfast nook, hardwood floors, tile bath, automatic heater. Large garage. Everything in fine condition. Large lot. Fine location. West of San Pablo avenue. Will take bid and some cash. A chance to get rid of lot and own good property. (945)

—RENTS—
5-ROOM HOUSE, unfurnished, garage, 11th street\$40
5-ROOM HOUSE, unfurnished, garage, 7th street\$40
2-ROOM APARTMENT, furnished, garage, Chanslor Ave., 4325

PAULSEN REALTY SERVICE
Realtors
California Theater Building
Telephone Richmond 825
Night Phone Richmond 2611-J

SCAVENGERS

RICHMOND SCAVENGER CO.
All sorts of refuse removed on short notice. Call phone 965 any time in afternoon.

Chinese Herbalists

The Oldest and Most Widely Known Practitioners—24 Years in SAME LOCATION

IF YOU ARE SICK COME TO US

Allments of whatever nature successfully relieved by our wonderful life-giving Chinese Herbs. When your case is given up as hopeless by others, give us a call. Charges reasonable.

OUR SPECIALTY
Stomach, liver, lungs, heart, kidneys, gall stones, skin diseases, eczema, ulcers, piles, neuritis, catarrh, asthma, cough, dizziness, nervousness, indigestion, rheumatism, high and low blood pressure, blood poison and poor circulation, and all female complaints. Honest and capable. Over 25,000 satisfied patients. Testimonials covering almost every known ailment are on file in our office.

THE ORIGINAL CHAN & KONG
Chinese Herb Specialists
901 Clay St., Cor. 9th (OAKLAND)
Be sure to have the correct name and address.

Personal Loans

DO YOU NEED MONEY?
SALARY AND AUTO LOANS

Contra Costa Loan & Finance Co.
P. O. RUPP, Manager
341 Tenth Street

LEGAL NOTICES

NOTICE TO VOTERS

Every person entitled thereto must register during the Year 1930, thirty (30) days before Election at which he or she may desire to vote.

Registration for School Trustees Election closes February 27, 1930.
Registration for Municipal Elections for Town of Sixth class closes March 13, 1930.
Registration for August Primary Election closes July 26, 1930.
Registration for General Election closes October 4, 1930.
Make application for Registration to the County Clerk or any of his Deputies.

J. H. WELLS, County Clerk
Contra Costa County, California

Date: January 1, 1930.
The registration deputies in the vicinity are:
A. C. Davis, chief deputy, City Hall, Richmond.
L. W. Brougham, City Hall, Richmond.
Mrs. J. Winifred Stidham, 14 Richmond Ave., Richmond.
Mrs. Mary E. Moyle, 641 San Pablo Ave., Richmond.
M. J. Gordon, 331 Macdonald Ave., Richmond.
M. O. Watson, 1202 Macdonald Ave., Richmond.
Miss Nanette L. Nesbit, 621 Bissell Ave., Richmond.
Edward A. Burg, 332-23rd St., Richmond.
Mrs. Margaret L. Gately, 2 Cypress Ave., Richmond.
Roy V. March, Standard Oil Co. Richmond.
Miss Georgia Johnson, 913 Barrett Ave., Richmond.
Mrs. Blanche Hoyle, 3715 Roosevelt Ave., Richmond.
Mrs. Elizabeth Chaga, 210 W. Richmond Ave., Richmond.
Claude E. Clark, 715 Macdonald Ave., Richmond.
Mrs. Ethel Hooper, 624-4th St., Richmond.
W. J. Richards, Jr., 931 Macdonald Ave., Richmond.
Miss Nellie Shoute, 205 San Pablo Ave., El Cerrito.
Mrs. Ida Mae Sampson, 1919 Mendocino St., Richmond.
Mrs. Leah Cassidy, 42 Armadora Road, Kensington Park.
John Sandvick, El Cerrito.
Mrs. Catherine Sandvick, El Cerrito.
Miss Nellie Shoute, El Cerrito.
Mrs. Olga Lee, El Cerrito.
Mrs. Jennie Mackinnon, El Cerrito.
Mrs. Alice Walker, City Hall, El Cerrito.
John Hewitt, Grant.
C. E. Whistler, San Pablo.
Mrs. Lilla Whistler, San Pablo.
Frank Silva, San Pablo.
Published from Jan. 26 to Oct. 4, 1930.

ROOFING

W. H. VERBICIO
The Ideal Roofing Co.
Richmond, Cal.
Roofing - Shingling and Painting
Estimates without obligation
Special budget plan
Rich. 2639
Route 1, Box 553, Berkeley

J. Winifred Stidham
Insurance-Loans-Conveyancing
125 Richmond Ave.
Telephone Rich. 848

For COLDS, COUGHS

Sore throat, muscular rheumatic aches & pains

AT ALL DRUGGISTS

WISTEROLE
BETTER THAN A MUSTARD PLASTER

School nurse says all girls should know this



TALKING to a roomful of high school girls on personal hygiene, an experienced district nurse said:

"One of the basic rules of health for girls is to keep the system functioning naturally at all times. Normal exercise and diet habits should be encouraged. And when necessary there's no harm in taking nujol, since it works mechanically, and can't disturb the normal functions of any organ of the body. Particularly with girls, there are times when nujol should always be taken. Take a spoonful every night for a few days. It's a thoroughly safe and harmless method. It won't cause distress or gas pain or griping."

Nujol is different from any other substance. It contains no drugs or medicine. It can be taken safely no matter how you are feeling because it is so pure and harmless, and works so easily. Every woman should keep a bottle on hand. Every druggist has this remarkable substance. Get the genuine.

GOLDEN DAWN

Copyright 1930, Warner Bros. Pictures Inc.
This story is based on Warner Bros. Vitaphone production of the play by Otto Harbach and Oscar Hammerstein II.

SYNOPSIS

Fair-skinned Dawn, mystery girl, is about to be burned alive by the black tribe, in the territory of the British East African Protectorate. Her crime is that she has failed, as the mystic wife of the black god Malingha, to divert the drought that is killing the crops. She has discovered that she is a white girl, not black. Her sweetheart, Tom, relish for the African settlement where he had been so long a prisoner. Duke made his escape to Mombasa shortly after Colonel Judson's troops captured the garrison. It must be added that Judson's marriage to the unspeakable American, Blisk, served to hasten Duke's flight. Too impoverished to pay his passage to England, Duke contented himself with Mombasa.

With his pitiable funds, he wandered from frog shop to frog shop, confining his visits to the stages along the water front where he not only found his funds adequate, but also managed to encounter some little excitement. His favorite rendezvous was the Geng Lee Tavern, a lovely dive which attracted alike the Germans, French and English who made Mombasa their port of call.

The Tavern was situated on a water front street and as he sat over his porter he could watch the ships in the harbor. Arrival of a British boat was the occasion of a festival. From the crew he learned of events in England and, if he were lucky, caded quite a few mugs of porter.

Seated in this room one evening, debating the wisdom of returning to his native land, he was in a present state of semi-sobriety, remaining to attain the full measure of intoxication. Duke was startled to hear a familiar voice raised in song. It came from the dance hall, where a handful of entertainers performed for the sailors. The singer's voice was a rich, ingrained, contralto, darkly suggestive of the jungle. Indeed, the songs were reminiscent of the chants of the voodoo worshippers.

Rising, Duke sauntered to the door of the dance hall and discovered the owner of the voice to be Moods. More attracted than ever, she stood in the middle of the floor, the roysterers silent for once, held speechless by the brooding mournfulness of her song. Blushed, she swept the group with a contemptuous glance, and entered the room where Duke was. She greeted him casually, manifesting no surprise to see him.

"You leave the settlement," she stated, rather than asked.

"Yes," returned Duke with disgust. "What is there to keep me there? I left after Blisk, the little tripe-head, married Judson."

Moods nodded. "I hear of it," she said. "You go to England, now?" Embarrassment settled on Duke. "Eventually," he countered. "It was originally my plan to escape from Africa and its countless horrors with the speed of a rising rocket. But circumstances," he added sadly, upraising the hands to describe the inexorable force of circumstances, "have necessarily delayed my departure."

The black woman comprehended. "You have no money," she said. "Now, after all," protested Duke, striving for dignity by affixing his monocle to his eye, "it is not criminal to be temporarily out of funds. I am financially embarrassed, but stable and, I may say, difficult to transport. I dresary that throughout the civilized world many an English gentleman is distressed by circumstances over which he regrettably has no control."

Moods's silent nod indicated that she agreed with Duke, however little Duke's embarrassment, his distressed English gentleman through-out the civilized world.

"And you," continued Duke, "why did you leave the settlement?" The woman grew agitated. "I run away," she said nervously. "In Duke's establishment, his eye muscles relaxed and he dropped his monocle. It was dashed to bits on the floor. This diverted him from Moods for the moment and after he had inspected the shattered glass and properly deplored the great disaster, he returned to her. She was again calm.

Stealthily Moods peered about, then, drawing nearer to Duke spoke in a confidential whisper.

"Did you ever see a ghost?" she asked.

Duke almost upset his mug of porter at the unexpectedness of the question.

"Rather not!" he exclaimed. "Though heaven knows this wretched Africa is possibly full of them."

"I see one," Moods confided. "Right here in Geng Lee Tavern. He come every night."

This was too weird and spine-chilling a topic for Duke. He gulped his porter and loudly set up a call for more. These voodoo practices and superstitions always disturbed him. There was nothing like it in the placid England for which he so ardently longed.

KRAFT CHEESE

There is no good reason why your dealer should offer you something else when you ask for KRAFT CHEESE

Overnight End COLDs

Stop a cold before it stops you. Take HILL'S Cascara-Bromide-Quinine. Stops the cold, checks the fever, opens the bowels, tones the system. Insist on HILL'S Red Box, 30c. All druggists.

HILL'S Cascara-Bromide-Quinine

Dog Guards Body Of Stricken Pal

SEATTLE, June 5.—UP—Bosporus, a German Shepherd dog, snarled defiance today at state highway police, who wanted to remove the dead body of his pal, an English Setter.

The setter was killed by an automobile as the two dogs frolicked along a highway. Bosporus crouched beside the setter for four hours, whining and licking the wounds—and defying all to remove the body. Highway police were forced to call humane officers who lassoed the shepherd and placed the dead setter in an ambulance. Bosporus was freed but leaped into the ambulance and defied police. They took him to Seattle and only when his owner, M. Young, arrived would Bosporus leave his dead friend.

Local Couples

File Intentions

Application for a marriage license was made in Oakland recently by David Lewis, 60, of 220 Kelsey street and Mary Clark, 44, of Alamo street, both of north Richmond.

Notice of intention to wed was filed in Oakland recently by Wallace McGregor, 22, of 1058 Pomona avenue, Albany and Margaret Wright, 22, of 6401 Fairmont avenue, El Cerrito.

Joseph Griffin, 21, of north Richmond and Edith Lewis, 18, of Oakland applied for a marriage license in Oakland recently.

Edward E. Grow, 22, of 318 Fourteenth street, Richmond, and Elsie E. Kerlin, 20, of San Pablo, applied for a marriage license in Martinez recently.

NEW TODAY

FOR RENT — Three room furnished apartment. Bath. Neat, clean. 163 11th St. 6-6-31

FOR RENT — Desirable cottage in Brookdale, centrally located. Apply 109 Jordan Ave., San Francisco. 6-6-31

WANTED — Young man, high school education, for sale of electric refrigerator. RECORD-HERALD, Box RWT-6-6. 6-6-31

Record Made In Transfusion Case

NEW YORK, June 5.—UP—After what was believed to be a record in local transfusion cases—the transfer into an ailing body of 22 pints of healthy blood—Fireman Bob Grant was able to walk from a hospital today.

Grant had been under treatment for four months. His left leg was crushed in a fire truck collision and gangrene set in. It was necessary to perform an amputation but even with this operation surgeons were doubtful if they could stay death. The transfusions, with fellow firemen offering their blood, proved successful, however.

Graf Nearing Home Port

FRIEDRICHSHAFEN, Germany, June 6.—Friday—UP—The Graf Zeppelin, flying here from Seville, Spain, radioed early today that it flew over Cape Degata, Spain, at midnight. Cape Degata is the southern most point of eastern Spain, and it was presumed that from there the dirigible would strike across the Mediterranean to the Rhone valley of France.

The midnight referred to in the message was believed to be Spanish time, or 7 p. m. EST Thursday. Capt. Joachim Breidhaupt, a passenger on the Graf wirelessly the United Press that the dirigible would return to Germany via France and Switzerland.

He said a heavy rain was falling when the Zeppelin passed Gibraltar at 9:40 p. m. Spanish time. The weather was clearing later, however.

Set-Up Trial Fails In Court

SAN FRANCISCO, June 5.—An attempt to sentence a cafe manager for serving cracked ice and white rock to his patrons failed in the federal court of Judge Kerrigan today.

Edwin Spohn, proprietor of the Silver Slipper cafe, was brought into court by the federal prohibition department on charges of maintaining a nuisance in violation of the Volstead act.

Judge Kerrigan, in instructing the jury to return a "not guilty" verdict, pointed out that evidence in the trial had failed to show that the management had sold any intoxicant.

Dr. W. J. Long Returns Home

Dr. W. J. Long, local chiropractor, has returned from Los Angeles where he attended the state chiropractor's convention over the weekend. Dr. Long went by way of Santa Fe to Barstow, and flew from there to Los Angeles.

Two Killed In Airplane Crash

GRAND HAVEN, Mich., June 5.—UP—Two men were killed and a third seriously injured when a cabin monoplane crashed to the earth after the motor failed at an altitude of 200 feet, 12 miles southeast of here late today.

The dead are Filbert McCirrid and Leonard Rennieck, both of Grand Rapids, Mich. The third man, who was unidentified, was taken to a local hospital in a critical condition.

BIG ESTATE

LOS ANGELES, June 5.—UP—Mrs. Sarah C. Getty, widow of G. F. Getty, oil man who recently died will inherit the bulk of an estate valued at approximately \$40,000,000, according to a will filed for probate here today.

BREUNER'S

"Everything for Your Home"

322 Tenth Street

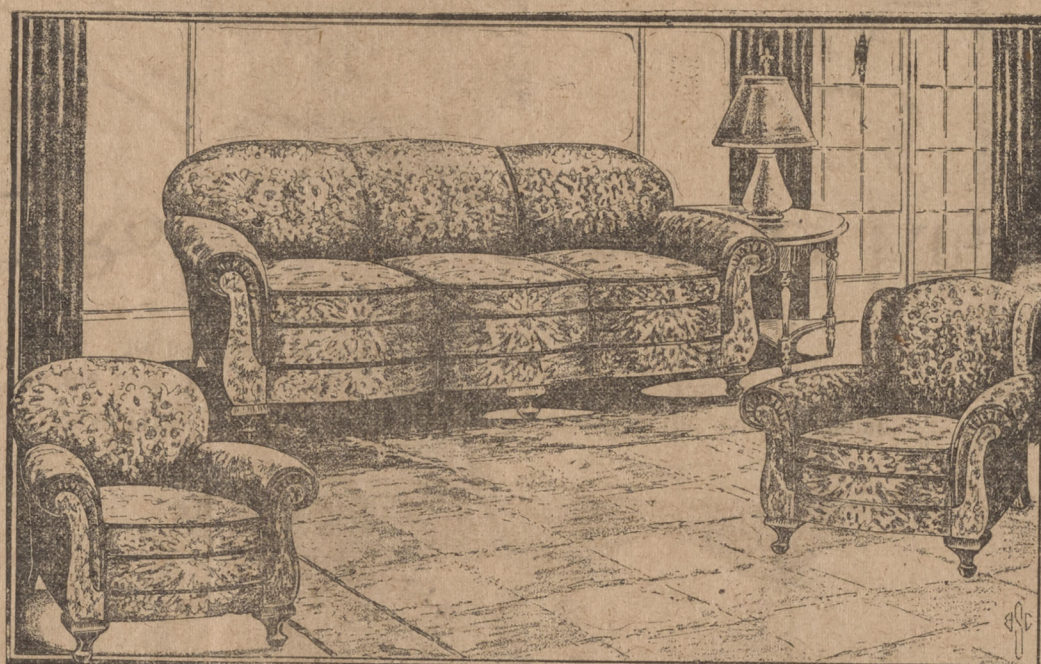
Richmond

Richmond 159

The 8-Piece June Bride Ensemble Completely Furnishes Her Living Room

\$139.75

\$10 Delivers
Entire Ensemble
To Your Home



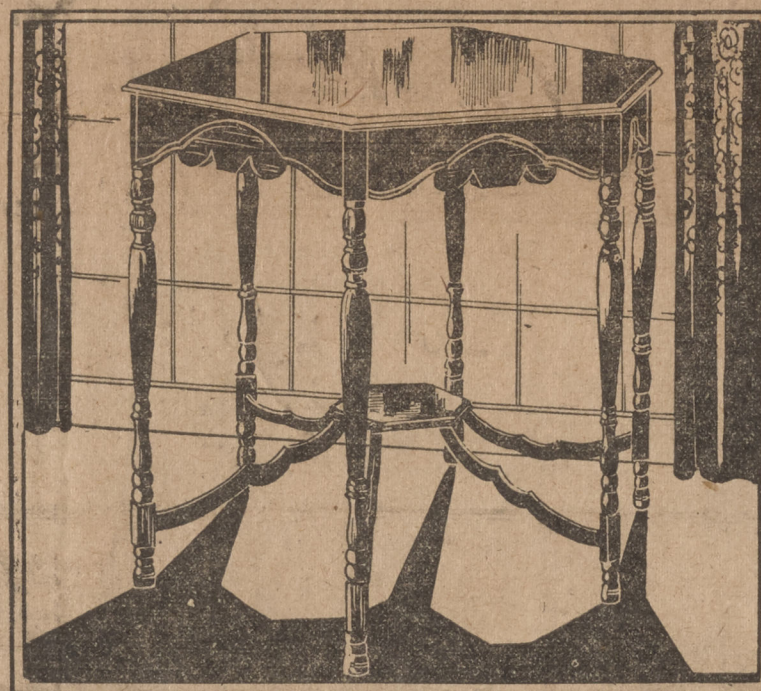
2-Pc. Kroehler Suite

\$75

THE FOUNDATION OF BEAUTY . . . in the Living Room is this Suite that will delight the Newlyweds. Upholstered in rich brown Jacquard Velour it embodies quality and fashion. Kroehler made in a choice of blue and taupe or rose and taupe Jacquard.

All Hardwood Occasional Table

\$15.95

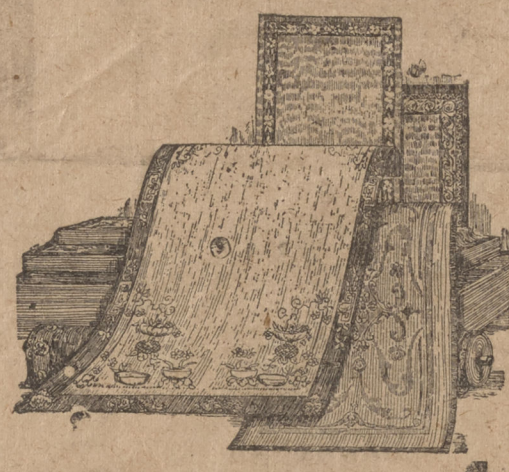


A BEAUTIFUL PIECE of furniture, style-right for the modern home . . . that will be the bride's! It is all hardwood with selected walnut veneers on all large surfaces. Six legs gracefully turned.

Room Size Axminster Rugs

\$25

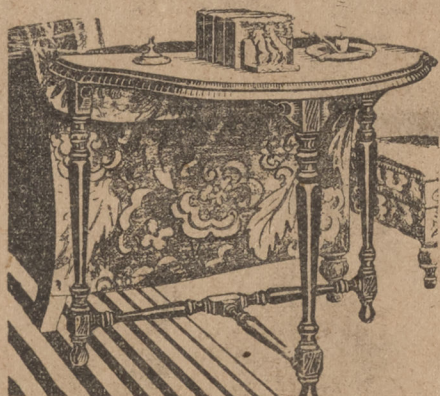
9x12-Foot Size



OUTSTANDING in beauty of design and coloring. They are all of seamless weave . . . in a choice of rose, green, blue, taupe and beige backgrounds. Delightful patterns!

Hardwood End Table

\$2.95



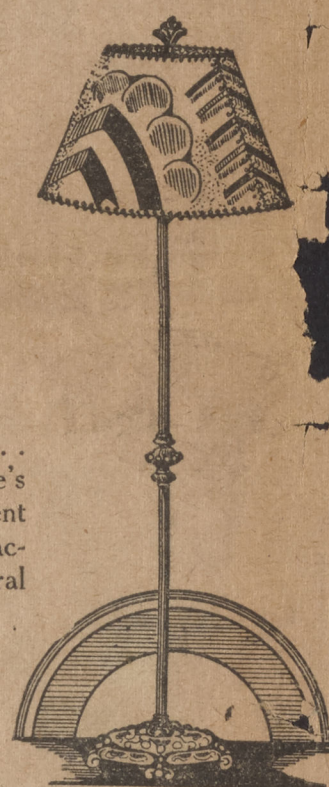
TO ENHANCE your favorite corner . . . and lend a friendly atmosphere with a table lamp. All hardwood construction with solid mahogany top and nicely carved legs and stretcher.

Floor Lamps

\$5.00

COMPLETE

ANTIQUED METAL Bases . . . to lend distinction to the bride's home. Lovely paper parchment shades in a choice of attractive color harmonies. Several lamps is the mode!

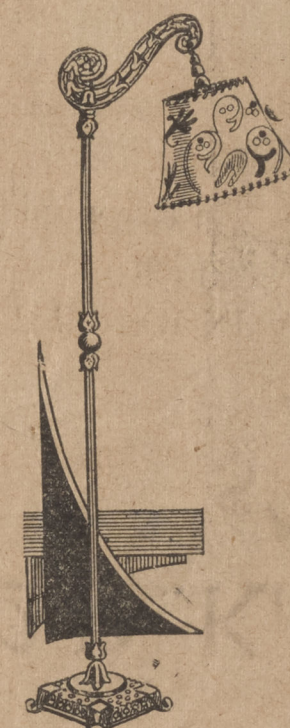


Bridge Lamps

\$5.00

COMPLETE

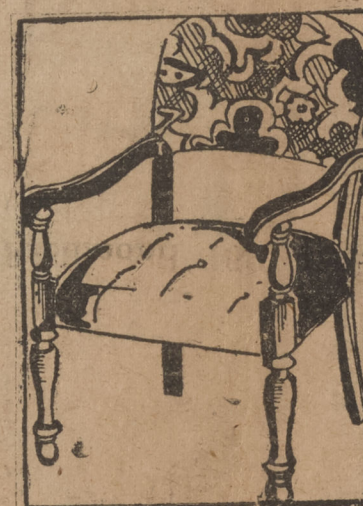
PLEATED CRETONNE SHADES if you like or soft colored parchment! Dainty colors that will combine beautifully with the living room group. Attractively designed.



Occasional Chair

\$10.85

ALL HARDWOOD construction . . . attractively finished in mahogany! Upholstered in assorted velours of lovely colors to harmonize of course, with the ensemble.



BREUNER'S

322 Tenth Street

"Everything for Your Home"

RICHMOND

Phone Richmond 159

The June Bride's Kitchen Must Be A Modern One



The New Thor Washer \$5 Down

Fastest and Most Thorough
of All Speed Washers

HAPPY DAYS AHEAD for the bride . . . with a New Thor Washer! Speed and efficiency are combined in this beautiful new washer. The beautiful green tub of the New Thor Agitator is baked porcelain enamel inside and out. A host of other features . . . Now \$108.50

Free Demonstration

New Wedgewood Combination

Green and
Ivory

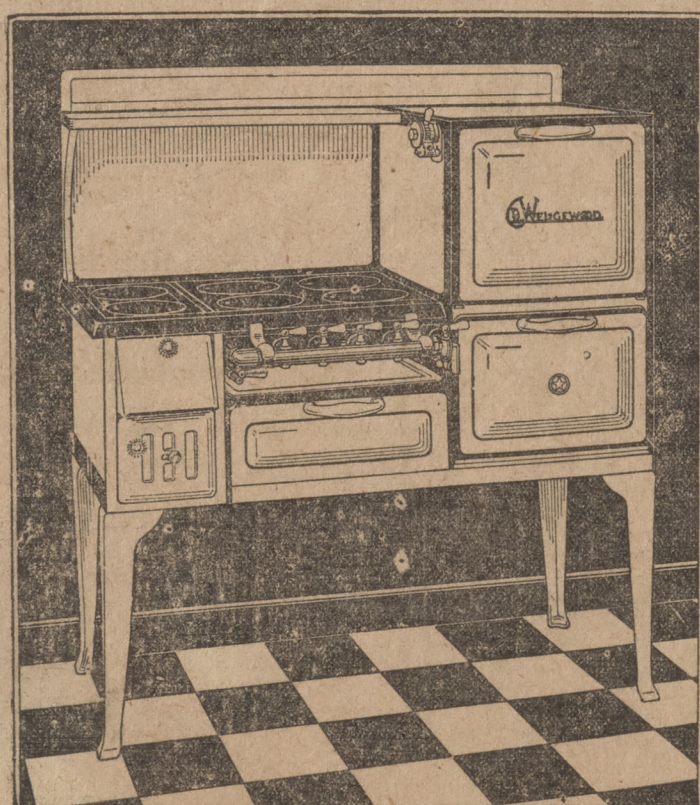
\$147.50

Installed

To harmonize with the Bride's kitchen. An all porcelain enamel range in green and ivory. Has large oven and broiler with porcelain linings. . . . Closed top cooking surface . . . Automatic Oven Heat Control . . . Kitchen heater for coal or wood.

NOTHING DOWN

Trade-In Your
Old Stove



D. buildings and the handling of such liquids shall not be permitted in any Group D buildings in quantities of more than one gallon unless such handling complies with the provisions of Ordinances of the City of Richmond regulating the same.

Any gas service to a Group D building shall be provided with an outside shut-off conspicuously marked.

Every boiler room or room containing heating apparatus shall be separated from the rest of the building with an "Absolute Fire Separation" as specified in Section 503.

Exceptions and Deviations
Sec. 909. No requirements of this Chapter shall be so construed as to prohibit the construction of cell blocks in jails or prevent the use of any locks or safety devices in buildings where it is necessary to forcibly restrain the inmates.

Two or three story buildings of Type V Construction shall not be permitted for use of Group D occupancies.

A ramp or ramps shall not be required in any hospital or sanitarium in which there is installed an elevator with a car platform not less than five (5) feet in width by seven (7) feet in depth and with a door opening thereto not less than three feet three inches (3' 3") in width and providing such elevator is so located as to serve all portions of the building which are required to be served by a ramp or ramps; provided, however, that such elevator shall be in addition to the stairway requirements for such hospital or sanitarium.

Mixed Occupancies
Sec. 910. Separation of Group D occupancies from any other occupancies shall be provided as specified in Section 503.

CHAPTER 10—REQUIREMENTS FOR GROUP E BUILDINGS
Group E Occupancies Defined

Sec. 1001. Each Group E occupancy shall be considered as a separate building and the Group shall include all industrial or commercial buildings in which the nature of the occupancy creates a serious fire or life hazard, such as:

Division 1: Public garages, paint or petroleum storage, dry cleaning plants, gasoline service stations, paint shops.

Division 2: Planing mills, box factories, woodworking and mattress factories.

Division 3: Storage of hazardous and highly inflammable or explosive materials and/or liquids.

Notes—Inflammable liquids shall be deemed to be those with a flash point below 190 degrees Fahrenheit as determined by the closed cup test.

Construction, Height and Area Allowable
Sec. 1002. (a) General. Buildings or parts of buildings classed in Group E because of the character of the occupancy shall be of Type I, II, III, IV or V Construction and the floor areas shall not exceed those specified in the following table.

Maximum Allowable Floor Areas as Determined by Height of Building, Street Frontage and Type of Construction

Types of Construction	Maximum Height for Corresponding Areas		Maximum Floor Areas (Sq. Ft.)			Increase for Complete Sprinkling*
	Feet	Stories	1 street	2 streets	3 or more streets	
Type I	150 ft.	NO RESTRICTIONS				
	75 ft.	7 stories	8,000	10,000	12,000	
Type II	55 ft.	5 stories	10,000	12,000	15,000	100%
	65 ft.	1 story	18,000	22,000	26,000	
Type III	55 ft.	5 stories	8,000	10,000	12,000	66 2-3%
	20 ft.	1 story	12,000	15,000	18,000	
Type IV	45 ft.	1 story	10,000	12,000	15,000	100%
Type V	30 ft.	1 story	8,000	9,000	10,000	66 2-3%

Notes—*Increase shall not be permitted unless the area is entirely protected by an automatic sprinkler installation as specified in Chapter 38.

Location on Property
Sec. 1003. All exterior walls or parts of walls, except on street fronts, of Group E buildings which are less than five (5) feet from adjacent property lines shall have no openings therein and shall be of masonry or reinforced concrete. All openings in exterior walls, except on street fronts, which are less than five (5) feet from adjacent property lines shall be protected by doors or windows of one-hour fire-resistive construction as specified in Section 4304. See Section 504 for regulating adjacent buildings on the same property.

Stairs and Exits
Sec. 1004. All Group E buildings shall have not less than two means of egress from each story including basements or cellars unless such basements or cellars are used for heating apparatus only, in which latter case only one exit shall be required.

All stairs and exits shall comply with the requirements specified in Chapter 33.

Smokeproof towers and fire escapes shall be installed as and when specified in Chapter 33.

Where ramps are used for the transfer of automobiles from one floor to another such ramps shall meet the ground floor level at a point not less than twenty (20) feet from the exit from such building.

Light, Ventilation and Sanitation
Sec. 1005. All portions of Group E buildings customarily used by human beings shall be provided with light and ventilation by means of windows and/or skylights with an area equal to one-eighth (1/8) of the total floor area or shall be provided with artificial light and mechanically operated ventilating system. The mechanically operated ventilating system shall supply at least thirty (30) cubic feet of air per minute for each occupant thereof in all portions of the building and such system shall be kept continuously in operation during such time as the building is occupied.

In all buildings used for the storing or handling of automobiles operated under their own power and in all buildings where inflammable liquids are used, the ventilation system shall be sufficient to produce one complete change of air every fifteen minutes. Such exhaust ventilation shall be taken from a point at or near the floor level.

All buildings where more than four persons are employed shall be provided with at least one toilet. All buildings where more than four persons are employed shall be provided with access to at least two toilets either located in such building or conveniently located in a building adjacent thereto.

Enclosure of Vertical Openings
Sec. 1006. All elevator shafts, vent shafts and other vertical openings shall be enclosed as specified under Types of Construction.

Doors which are part of an automobile ramp enclosure may be kept normally open but shall be equipped with fusible links and so arranged as to be self-closing when released.

Fire Extinguishing Apparatus
Sec. 1007. Automatic sprinklers, standpipes and basement pipe inlets shall be installed as and when specified in Chapter 38.

Special Hazards
Sec. 1008. Chimneys and heating apparatus shall conform to the requirements of Chapter 37, except that no open flame or heat producing apparatus shall be installed or maintained in any garage, dry cleaning establishment or place of storage of volatile or inflammable liquids.

In dry cleaning establishments the walls of the cleaning rooms or rooms in which volatile inflammable liquids are used shall have vent holes at the floor line not less than sixteen (16) square inches in area placed not more than sixteen (16) feet apart at or near the floor line, properly protected by iron bars or screens, or such room may be equipped with exhaust ventilation sufficient to cause a complete change of air four times an hour with exhaust duct openings located at or near the floor line.

The use, handling, storage and sale of gasoline, fuel oil and other inflammable liquids shall not be permitted in any Group E building unless such use, handling, storage and sale complies with the provisions of ordinances of the City of Richmond regulating the same.

All doors leading into rooms in which volatile inflammable liquids are used shall be of not less than one hour fire-resistive construction as specified in Section 4304 and kept normally closed or shall be equipped with fusible links and so arranged as to be self-closing when released.

Each machine in dry cleaning establishments which uses a volatile inflammable liquid shall have an adequate steam line directly connected to it, so arranged as to have the steam automatically released to the inside of such machine should an explosion occur in the machine.

Exceptions and Deviations
Sec. 1009. Public garages, planing establishments using inflammable liquids and all buildings in which inflammable liquids are used, sold or stored shall not be of Type V Construction, shall not be of Type III construction when more than two (2) stories in height, and shall be not over six hundred (600) square feet in area or twenty-five (25) feet in height when of Type IV construction.

All public garage floors shall be of incombustible materials and if not placed directly on the ground shall conform to the requirements for floors of Type V Construction, shall be of Type V Construction, shall be properly protected with incombustible materials against saturation by oil and grease.

Gasoline filling stations shall not be of Type V Construction.

Division 3: Storage and sales rooms for combustible goods.

Mixed Occupancies
Sec. 1010. Separation of Group E occupancies from all other occupancies shall be provided as specified in Section 503.

CHAPTER 11—REQUIREMENTS FOR GROUP F BUILDINGS
Group F Occupancies Defined

Sec. 1101. Each Group F occupancy shall be considered as a separate building and the Group shall include all moderately hazardous industrial and commercial occupancies, such as:

Division 1: Wholesale and retail stores, office buildings, restaurants, undertaking parlors, printing plants, municipal police and fire stations.

Division 2: Factories and workshops using materials not highly inflammable or combustible.

Division 3: Storage and sales rooms for combustible goods.

Construction Height and Area Allowable
Sec. 1102. Buildings or parts of buildings classed in Group F because of use or the character of the occupancy shall be of Types I, II, III, IV or V Construction and the floor areas shall not exceed those specified in the following table.

III, IV or V Construction and the floor areas shall not exceed those specified in the following table.

Maximum Allowable Floor Areas as Determined by Height of Building, Street Frontage and Type of Construction

Types of Construction	Maximum Height for Corresponding Areas		Maximum Floor Areas (Sq. Ft.)			Increase for Complete Sprinkling*
	Feet	Stories	1 street	2 streets	3 or more streets	
Type I	150 ft.	NO RESTRICTIONS				
	75 ft.	7 stories	12,000	15,000	18,000	
Type II	55 ft.	5 stories	15,000	18,000	20,000	100%
	65 ft.	1 story	20,000	25,000	30,000	
Type III	55 ft.	5 stories	12,000	15,000	18,000	66 2-3%
	20 ft.	1 story	18,000	22,500	25,000	
Type IV	45 ft.	1 story	20,000	25,000	30,000	100%
Type V	40 ft.	3 stories	5,000	6,000	7,000	66 2-3%
	20 ft.	1 story	10,000	12,000	14,000	

Notes—*Increase shall not be permitted unless the area is entirely protected by an automatic sprinkler installation as specified in Chapter 38.

Location on Property
Sec. 1103. All exterior walls or parts of walls, except on street fronts, of Group F buildings which are less than four (4) feet from adjacent property lines shall have no openings therein and shall be of masonry or reinforced concrete. All openings in exterior walls, except on street fronts, which are less than four (4) feet from adjacent property lines shall be protected by doors or windows of one-hour fire-resistive construction as specified in Section 4304. See Section 504 for regulating adjacent buildings on the same property.

Stairs and Exits
Sec. 1104. Stairs and exits shall be provided as specified in Chapter 33.

Smokeproof towers and fire escapes shall be provided as and when specified in Chapter 33.

Light, Ventilation and Sanitation
Sec. 1105. All portions of Group F buildings customarily used by human beings shall be provided with light and ventilation by means of windows and/or skylights with an area not less than one-eighth (1/8) of the total floor area or shall be provided with artificial light and a mechanically operated ventilating system. In no case shall less than four changes of air per hour be provided.

Every building or portion thereof where more than four persons are employed shall be provided with at least one toilet. Every building and each subdivision thereof where both sexes are employed shall be provided with access to at least two toilets either located in such building or conveniently located in a building adjacent thereto.

Enclosure of Vertical Openings
Sec. 1106. All elevator shafts, vent shafts and other vertical openings shall be enclosed as specified under Types of Construction.

Fire Extinguishing Apparatus
Sec. 1107. Automatic sprinklers, standpipes and basement pipe inlets shall be installed as and when specified in Chapter 38.

Special Hazards
Sec. 1108. Chimneys and heating apparatus shall conform to the requirements of Chapter 37.

No storage of volatile inflammable liquids shall be allowed in Group F buildings and the handling and use of gasoline, fuel oil and other inflammable liquids shall not be permitted in any Group F building unless such use and handling complies with the provisions of ordinances of the City of Richmond regulating the same.

Exceptions and Deviations
Sec. 1109. Roof covering on Type V buildings may be of galvanized iron or sheet metal laid directly on the wood roof framing without solid sheathing.

Division 3: Buildings of Group F more than six (6) stories in height shall have all floors of not less than three hour fire-resistive construction as specified in Section 4303.

Mixed Occupancies
Sec. 1110. Separation of Group F occupancies from all other occupancies shall be provided as specified in Section 503.

CHAPTER 12—REQUIREMENTS FOR GROUP G BUILDINGS
Group G Occupancies Defined

Sec. 1201. Each Group G occupancy shall be considered as a separate building and the Group shall include non-hazardous industrial and commercial occupancies which create a low fire and life hazard, such as:

Division 1: Ice plants, power plants, pumping plants, cold storage, creameries.

Division 2: Factories and workshops, using incombustible and/or non-explosive materials.

Division 3: Storage and sales rooms of incombustible and/or non-explosive materials.

Construction, Height and Area Allowable
Sec. 1202. Buildings or parts of buildings classed in Group G because of use or the character of the occupancy shall be of Types I, II, III, IV or V Construction and the floor areas shall not exceed those specified in the following table.

Types of Construction	Maximum Height for Corresponding Areas		Maximum Floor Areas (Sq. Ft.)			Increase for Complete Sprinkling*
	Feet	Stories	1 street	2 streets	3 or more streets	
Type I	150 ft.	NO RESTRICTIONS				
	75 ft.	7 stories	15,000	18,000	20,000	
Type II	55 ft.	5 stories	20,000	25,000	30,000	100%
	65 ft.	1 story	UNRESTRICTED			
Type III	55 ft.	5 stories	12,000	15,000	18,000	66 2-3%
	20 ft.	1 story	20,000	25,000	30,000	
Type IV	45 ft.	1 story	25,000	30,000	35,000	100%
Type V	40 ft.	3 stories	10,000	12,500	15,000	66 2-3%
	20 ft.	1 story	12,000	15,000	18,000	

Notes—*Increase shall not be permitted unless the area is entirely protected by an automatic sprinkler installation as specified in Chapter 38.

Location on Property
Sec. 1203. All exterior walls or parts of walls, except on street fronts, of Group G buildings which are less than three (3) feet from adjacent property lines shall have no openings therein and shall be of not less than one hour fire-resistive construction as specified in Section 4302. See Section 504 for regulating adjacent buildings on the same property.

Stairs and Exits
Sec. 1204. Stairs and exits shall be provided as specified in Chapter 33.

Smokeproof towers and fire escapes shall be provided as and when required in Chapter 33.

Light, Ventilation and Sanitation
Sec. 1205. All portions of Group G buildings customarily used by human beings shall be provided with light and ventilation.

Every building or portion thereof where more than four persons are employed shall be provided with at least one toilet. Every building and each subdivision thereof where both sexes are employed shall be provided with access to at least two toilets either located in such building or conveniently located in a building adjacent thereto.

Enclosure of Vertical Openings
Sec. 1206. Except as specified in Chapter 33, vertical openings are not required to be enclosed.

Fire Extinguishing Apparatus
Sec. 1207. Automatic sprinklers, standpipes and basement pipe inlets shall be installed as and when specified in Chapter 38.

Special Hazards
Sec. 1208. Chimneys and heating apparatus shall conform to the requirements of Chapter 37.

The storage, use and handling of gasoline, fuel oil and other inflammable liquids shall not be permitted in any Group G building unless such storage and handling complies with the provisions of ordinances of the City of Richmond regulating the same.

Exceptions and Deviations
Sec. 1209. Roof covering on Type V buildings may be of galvanized iron or sheet metal laid directly on the wood roof framing without solid sheathing. Fireproofing of the under side of all roof framing of Group G buildings may be omitted in all types of Construction.

Mixed Occupancies
Sec. 1210. Separation of Group G occupancies from all other occupancies shall be provided as specified in Section 503.

CHAPTER 13
REQUIREMENTS FOR GROUP H BUILDINGS
Group H Occupancies Defined

Sec. 1301. Each Group H occupancy shall be considered as a separate building and the Group shall include:

Division 1: Hotels, apartment houses, dormitories, lodging houses.

Division 2: Convents, monasteries, old people's homes (accommodating ten or more persons).

Construction Height and Area Allowable
Sec. 1302. Buildings or parts of buildings classed in Group H because of use or the character of the occupancy shall be of Types I, II, III, IV or V Construction and the floor areas shall not exceed those specified in the following table.

III or V Construction and the floor areas shall not exceed those specified in the following table.

Maximum Allowable Floor Areas as Determined by Height of Building, Street Frontage and Type of Construction

Types of Construction	Maximum Height for Corresponding Areas		Maximum Floor Areas (Sq. Ft.)			Increase for Complete Sprinkling*
	Feet	Stories	1 street	2 streets	3 or more streets	
Type I	150 ft.	NO RESTRICTIONS				
	75 ft.	7 stories	12,000	15,000	18,000	
Type II	55 ft.	5 stories	15,000	18,000	20,000	100%
	65 ft.	1 story	20,000	25,000	30,000	
Type III	55 ft.	5 stories	12,000	15,000	18,000	66 2-3%
	20 ft.	1 story	18,000	20,000	22,500	
Type V	40 ft.	3 stories	6,000	7,000	8,000	66 2-3%
	20 ft.	1 story	8,000	9,000	10,000	

Notes—*Increase shall not be permitted unless the area is entirely protected by an automatic sprinkler installation as specified in Chapter 38.

Location on Property
Sec. 1303. All exterior walls or parts of walls, except on street fronts, of Group H buildings which are less than three (3) feet from adjacent property lines shall have no openings therein and shall be of not less than one-hour fire-resistive construction as specified in Section 4302. All openings in exterior walls, except on street fronts, which are less than four (4) feet from adjacent property lines shall be protected by doors or windows of one-hour fire-resistive construction as specified in Section 4304. See Section 504 for regulating adjacent buildings on the same property.

Stairs and Exits
Sec. 1304. Stairs and exits shall be provided as specified in Chapter 33.

Smokeproof towers and fire escapes shall be provided as and when specified in Chapter 33.

Light, Ventilation and Sanitation
Sec. 1305. All rooms of Group H buildings used for eating, living and/or sleeping purposes shall be provided with light and ventilation by means of windows with an area not less than one-eighth (1/8) of the total floor area of any room or rooms.

Every building shall be provided with at least one toilet. Every building and each subdivision thereof where both sexes are accommodated shall be provided with access to at least two toilets located in such building and one such toilet shall be conspicuously marked "For Women," and the other conspicuously marked "For Men." Not less than one toilet shall be provided for each floor of a building or major fraction thereof that such building is designed to accommodate.

Enclosure of Vertical Openings
Sec. 1306. All elevator shafts, vent shafts, stairways and other vertical openings shall be enclosed as specified under Types of Construction.

Fire Extinguishing Apparatus
Sec. 1307. Automatic sprinklers, standpipes and basement pipe inlets shall be installed as and when specified in Chapter 38.

Special Hazards
Sec. 1308. Chimneys and heating apparatus shall conform to the requirements of Chapter 37.

No storage of volatile inflammable liquids shall be allowed in Group H buildings and the handling and use of gasoline, fuel oil and other inflammable liquids shall not be permitted in any Group H building unless such use and handling complies with the provisions of ordinances of the City of Richmond regulating the same. All doors leading into rooms in which volatile inflammable liquids are used or stored shall be of not less than one-hour fire-resistive construction as specified in Section 4304 and shall be kept normally closed.

Exceptions and Deviations
Sec. 1309. The partitions forming separations between apartments and public corridors and/or public stairways shall be plastered on metal lath or plaster board on the apartment side thereof.

The partitions forming the separations between adjoining apartments shall be plastered on metal lath or plaster board, when the aggregate floor area of one or more such apartments exceeds twelve hundred (1200) square feet.

Mixed Occupancies
Sec. 1310. Separations between Group H occupancies and all other occupancies shall be provided as specified in Section 503.

CHAPTER 14
REQUIREMENTS FOR GROUP I BUILDINGS
Group I Occupancies Defined

Sec. 1401. Each Group I occupancy shall be considered as a separate building and the group shall include any buildings or parts of buildings used as dwellings.

Construction, Height and Area Allowable
Sec. 1402. Buildings or parts of buildings classed in Group I because of use or the character of the occupancy shall be of Types I, II, III, IV or V Construction. The floor area of Types I and II buildings shall be unlimited, the floor area of Types III and IV shall be limited to ten thousand (10,000) square feet, and the floor area of Type V shall be limited to seventy-five hundred (7,500) square feet.

Location on Property
Sec. 1403. All exterior walls or parts of walls, except on street fronts, of Group I buildings which are less than three (3) feet from adjacent property lines shall have no openings therein and shall be of not less than one-hour fire-resistive construction as specified in Section 4302.

Stairs and Exits
Sec. 1404. Stairs and exits shall be provided as and when specified in Chapter 33.

Light, Ventilation and Sanitation
Sec. 1405. All rooms of Group I buildings used for eating, living and/or sleeping purposes shall be provided with light and ventilation by means of windows with an area not less than one-eighth (1/8) of the total floor area of any room or rooms.

Enclosure of Vertical Openings
Sec. 1406. Stairs in Group I buildings need not be enclosed. Dumb-waiter shafts, closets or other similar vertical openings shall be protected as specified in Section 3002.

Fire Extinguishing Apparatus
Sec. 1407. Fire extinguishing apparatus when installed shall conform to the requirements of Chapter 38.

Special Hazards
Sec. 1408. Chimneys and heating apparatus shall conform to the requirements of Chapter 37.

Inflammable liquids shall not be stored or used in Group I buildings in quantities in excess of one (1) gallon and all such inflammable liquids shall be kept in approved containers when not in actual use.

Exceptions and Deviations
Sec. 1409. Dwellings constructed on the roof of multiple storied buildings shall be considered as an additional story in so far as fire-resistive construction, exposure, stairs, exits and fire extinguishing apparatus is concerned.

The Bath room of a Group I building, erected within three (3) feet of an adjacent property line, may have a window of not less than one (1) square foot in area and is located not less than eighteen (18) inches from adjacent property line.

Mixed Occupancies
Sec. 1410. Separation of Group I occupancies from all other occupancies shall be provided as specified in Section 503.

CHAPTER 15
REQUIREMENTS FOR GROUP J BUILDINGS
Group J Buildings Defined

Sec. 1501. Each Group J building or occupancy shall be considered as a separate building and the Group shall include:

Division 1: Private garages.

Division 2: Accessory buildings and structures such as sheds, fences over six feet high, water tanks, towers.

Division 3: Stadiums,

the expiration of the time limit in this permit.

(3) No group E buildings except public garages or gasoline filling stations shall be constructed or erected in Fire Zone No. 2 and no existing buildings shall be used or occupied in any manner whatsoever by group E occupancies except as public garages or gasoline filling stations, except as noted in Section 1602 (D).

Restrictions in Fire Zone No. 3

Sec. 1604. (a) No building or structure of Type V Construction shall be erected in Fire Zone No. 3 with an area in excess of four thousand (4000) square feet.

(b) Any building in Fire Zone No. 3 which is enlarged, altered, raised or built upon to an extent exceeding the height of fifty (50) feet above the value of the value of such structure shall be made to comply with the requirements of a Type I, II, III, IV, or V building except that floors in the first story of such building need not comply with such requirements.

(c) Any building or structure moved into or within Fire Zone No. 3 shall comply with all requirements for new buildings in Fire Zone No. 3.

(d) Buildings of Type V Construction may be built in excess of four thousand (4000) square feet providing such buildings are divided by "Special Fire Separation" as specified in Section 503, into areas not exceeding four thousand (4000) square feet.

Restrictions in Fire Zone No. 4

Sec. 1605. Any building complying with the requirements specified in this Code may be erected or moved into or within Fire Zone No. 4.

REQUIREMENTS BASED ON TYPES OF CONSTRUCTION

CHAPTER 17—CLASSIFICATION OF ALL BUILDINGS BY TYPES OF CONSTRUCTION

Sec. 1701. The requirements of Part V are the minimum requirements for the various Types of Construction. In order that a building may be classified in any specific Type of Construction, it is necessary that all of the requirements for that Type of Construction be complied with.

No building or portion thereof shall be required to conform to the details of a Type of Construction when the building which meets the minimum requirements based on Occupancy (Part III) or Location in Fire Zone (Part IV) even though certain features of such building actually conform to a higher Type of Construction.

The various Types of Construction hereinafter classified represent varying degrees of public safety and resistance to fire. Where specific materials, types of construction or fire-resistive protection are required, such requirements shall be the minimum requirements and any other materials, types of construction or fire-resistive protection which will afford equal or greater public safety or resistance to fire, as specified in this Code, may be used.

Any system or method of construction to be used shall admit of a rational analysis in accordance with well established principles of mechanics.

Classification by Types of Construction

Sec. 1702. All buildings for the purpose of this Code shall be divided into the following Types of Construction, when erected, existing or altered, for the purposes of this Code Type I shall be deemed to be the most fire-resistive and Type V the least fire-resistive Type of Construction.

Type I—FIRE-RESISTIVE Construction.
Type II—HEAVY TIMBER Construction.
Type III—ORDINARY MASONRY Construction.
Type IV—METAL FRAME Construction.
Type V—WOOD FRAME Construction.

When two or more types of construction occur in the same building and are not separated by an "Absolute Fire Separation" as specified in Section 503, the entire building shall be classified in the lowest Type of Construction which such building shall be subject to the restrictions of such type. Any building erected prior to the passage of this Code, which by its construction cannot be definitely classified as Type I, II, III, IV, or V, shall be deemed to belong to the purpose of this Code to be the most fire-resistive and Type V the least fire-resistive of the two types to which it most nearly conforms.

CHAPTER 18—TYPE I BUILDINGS (Fire-Resistive)

Sec. 1801. "Type I" or "Type I Buildings." The structural frame of Type I buildings shall be of structural steel or iron which shall be fireproofed, or shall be of reinforced concrete. The foundation, exterior walls, inner court walls enclosing vertical openings, shall be of masonry or reinforced concrete. The roof construction and floors shall be of fire-resistive materials. Exterior doors and windows, except as specified in Section 1807, shall be of fire-resistive construction. Fire-resistive materials and fire-resistive construction have a specific meaning in this Code, as specified in Chapters 42 and 43.

Height Allowable

Sec. 1802. Type I buildings shall not exceed a height of one hundred and fifty (150) feet or twice the width of the widest street (measured at right angles from the line of such a building to the opposite side of the street) upon which they are erected, whichever is less; provided, that such height shall not apply to pent houses, or other roof structures which conform to the requirements of Section 1801, and that towers, spires and steeples erected as part of such a building may extend, not to exceed fifty (50) feet, above the roof line.

Sec. 1803. The floor area of Type I buildings shall not be limited.

Foundations

Sec. 1804. Foundation walls and footings shall be of solid masonry as specified in Chapter 26 and 29, and shall be designed as specified in Sections 2306 and 2802.

Exterior and Inner Court Walls

Sec. 1805. All exterior walls, fire walls and fire division walls shall be of masonry or reinforced concrete as specified in Chapter 29 and shall be of not less than four hour fire-resistive construction as specified in Section 4302.

Inner court walls shall be of masonry or reinforced concrete of not less than three hour fire-resistive construction as specified in Section 4302.

Partitions

Sec. 1806. Interior partitions shall be constructed of incombustible materials and shall be of not less than one-hour fire-resistive construction as specified in Section 4302.

Except in buildings having portions of stores, offices or similar places occupied by one tenant only may be constructed of wood panels or similar light construction up to three-fourths (3/4) the height of the room in which placed, when fire-resistive protection shall be provided for the height of the room, such partitions shall have not less than the upper one-fourth (1/4) of the partition constructed of glass set in sash.

Enclosure of Vertical Openings

Sec. 1807. Enclosures for elevator shafts, vent shafts, stair wells and other vertical openings, when required because of Occupancy in Part III shall be of two-hour fire-resistive construction and all openings therein shall be protected by fire-resistive doors or windows as specified in Chapter 30 and 42.

Parapet wall or hand rail at least thirty (30) inches in height above the roof shall be provided around all open shaft enclosures extending through the roof.

Structural Framework

Sec. 1808. Structural framework shall be of structural steel or iron as specified in Chapter 27 or shall be of reinforced concrete as specified in Chapter 28.

The structural frame shall be considered as the columns and all girders, beams, trusses or spandrels having rigid connections to the columns. The columns, beams, trusses or spandrels shall have no connection to the columns, shall be considered secondary members. The structural frame and secondary members shall be designed and constructed to carry all dead, live and other loads to which they may be subjected both during erection and after completion of the structure. Unless otherwise provided for in the structural frame the floor and roof panel construction shall be designed and constructed to carry the horizontal forces to such structural members as are designed to carry the horizontal forces to the foundations.

The entire structural frame and each member which is a part of such frame shall be so designed and constructed that the stresses may be satisfactorily determined by rational analysis in accordance with well established principles of mechanics and sound engineering practice.

Fireproofing of Structural Members

Sec. 1809. (a) All structural steel or iron members, not including forms or structural members for elevator enclosures, shall be thoroughly fireproofed with not less than four hour fire-resistive protection for columns, beams and girders and three hour fire-resistive protection for floors, roofs and walls. They may be fireproofed by any method approved by the building department, but fire-resistive protection for columns, beams and girders and two hour fire-resistive protection for floors for all buildings which are eight (8) stories or eighty-five (85) feet in height, and all such fire-resistive protection shall be as specified in Chapter 43.

Exceptions: (1) The thickness of the fireproofing on the outer edge of lugs or brackets on columns may be reduced to not less than one (1) inch.

(2) The masonry over window openings may be supported by a steel plate, angle or similar member which is not fireproofed on the under side, provided the member is supported at proper intervals from a structural beam or girder which is fireproofed on all sides. For openings in masonry bearing walls not exceeding four (4) feet in width, an angle or similar member supported by masonry and not the under side may be used.

(3) Where every part of the structural steel framework of the roof of a Group A, B or C building is not less than twenty-five (25) feet above any floor or balcony, fireproofing of all members of the roof construction may be omitted.

(4) Where every part of the structural steel framework of the roof of a Group A, B or C building is more than eighteen (18) feet and less than twenty-five (25) feet above any floor or balcony, the roof construction shall be protected by a suspended ceiling of not less than one hour fire-resistive construction as specified in Chapter 43, and such ceiling shall be not less than six (6) inches distant from any part of such roof construction.

(b) All reinforced concrete columns, beams and girders shall be thoroughly fireproofed with four-hour fire-resistive protection and all floors, roofs and slabs shall be thoroughly fireproofed with not less than three-hour fire-resistive protection for all buildings which are eight (8) stories or eighty-five (85) feet in height; and all reinforced concrete columns, beams and girders shall be thoroughly fireproofed with not less than three-hour fire-resistive protection for all buildings which are eight (8) stories or eighty-five (85) feet or less in height; and all such fire-resistive protection shall be as specified in Chapter 43.

Floor Construction

Sec. 1810. Floors shall be constructed of reinforced concrete, brick or hollow tile arches, reinforced gypsum or may be composite floors of those materials in combination. The floor construction shall consist of any floor system providing not less than two hour fire-resistive construction as specified in Chapter 43, and such floor construction shall be not less than three hour fire-resistive construction as specified in Section 4303 for all buildings more than eight (8) stories or eighty-five (85) feet in height.

The type of floor construction used shall provide means to keep the beams and girders from spreading, either by installing ties or by providing with no laterally unsupported length of joists being permitted to exceed ten (10) feet. The floor and roof panel construction shall be so designed and constructed as to transfer horizontal forces to such parts of the structural frame as are designed to carry the horizontal forces to the foundations.

Where wood sleepers are used for laying wood floors the space between the floor slab and the underside of the wood flooring shall be filled with incombustible material in such a manner that there will be no open spaces under the flooring which will exceed one hundred (100) square feet in area and such space shall be filled solidly under all partitions so that there is no communication under the flooring between adjoining rooms.

Roof Construction

Sec. 1811. Roofs shall be constructed of any materials or combination of materials as allowed for floors in Section 1810.

Roof covering shall be a "Fire-Retardant" roofing as specified in Section 4305.

Any drainage fill placed on a roof of any building shall be an incombustible material and such fill shall be considered as a part of

the dead load in designing the roof framing.

Stairs

Sec. 1812. Stairs and stair platforms shall be constructed of reinforced concrete, or of steel, or of heavy timber, or of other heavy incombustible materials may be used for the finish of such treads and risers.

All stairs shall be designed and constructed as specified in Chapter 33 and as specified under Occupancy in Part III.

Doors and Windows

Sec. 1813. (a) Doors, windows and other openings in the exterior walls shall be protected by one-hour fire-resistive construction as specified in Section 4304.

Exceptions: (1) The provisions of this Section shall not apply to doors, windows and other openings which face directly upon, and are not within fifty (50) feet in Fire Zone No. 1 or are not within thirty (30) feet in Fire Zone No. 2, 3 and 4, of the opposite side of a public street or other public place, this distance to be measured at right angles to the plane of the wall in which such openings occur.

(2) The provisions of paragraph (a) of this Section shall not apply to openings in an outer court (twenty (20) feet or more in width parallel to and facing upon a street or public place, provided such openings are not within twenty (20) feet of an adjacent property line.

Projections from the Building

Sec. 1814. Bays, oriels and similar projections shall be constructed of incombustible materials with walls, floors and roofs as specified in this Chapter and as specified in Chapter 35.

Porches and exterior balconies shall be constructed of incombustible materials but structural steel or iron members need not be fireproofed; provided, that loading platforms for warehouses, freight depots and other similar buildings may be of heavy timber construction with wood floors not less than one and five-eighths (1 5/8) inches thick. Such wood construction shall not be carried through the exterior walls of any Type I building.

Cornices, marquees and similar appendages which are a part of a Type I building shall be constructed of substantial incombustible materials and as specified in Chapter 45.

Penthouses and Skylights

Sec. 1815. Penthouses and other roof structures shall be constructed of reinforced concrete, or of steel, or of heavy timber, or of other heavy incombustible materials may be used for the finish of such treads and risers. Penthouses or other openings therein shall be protected by one-hour fire-resistive construction or shall have one-hour fire-resistive windows as specified in Chapters 36 and 43.

Skylights shall be constructed of one-hour fire-resistive materials as specified in Chapter 43 and in Section 4302.

Combustible Materials Regulated

Sec. 1816. Wood or unprotected steel or iron shall be permitted in the following places:

(1) Mezzanine floors may be of wood or unprotected steel provided that there shall not be more than two such mezzanines provided for any building, and, further, that no such mezzanine floor or floors shall cover more than thirty-three and one-third (33 1/3) per cent of the area in the room where located. Such mezzanine floors constructed in Fire Zone No. 1 shall be of heavy timber construction as specified for floor construction in Type II buildings.

(2) Show window frames and aprons, also show cases and other appendages on the first floors of stores or other similar buildings may be of wood with or without unprotected steel or iron.

(3) Trim, picture molds, chair rails, wainscoting, baseboards, hand rails, show window backing, temporary partitions, floors, and wood floors may be of wood, except in buildings where specifically prohibited under Occupancy in Part III.

(4) Roofs may be sheathed by wood planks of two and one-half (2 1/2) inch nominal thickness, not less than one (1) inch thick, and shall be thirty (30) feet distant from any floor, balcony or gallery and when such plank sheathing is protected on the underside by a ceiling of not less than one hour fire-resistive construction as specified in Chapter 43.

CHAPTER 19—TYPE II BUILDINGS (Heavy Timber Construction)

Definition

Sec. 1901. "Type II" or "Type II Buildings." The structural frame of Type II buildings shall be of structural steel or iron which shall be fireproofed, or reinforced concrete, or masonry or of heavy timbers, provided, that in buildings not exceeding one story and sixty-five (65) feet in height the structural frame may have the fireproofing omitted. Foundations and exterior walls shall be of solid masonry or reinforced concrete. Inner court walls shall be of masonry or reinforced concrete of two hour fire-resistive construction as specified in Chapter 43 and in Section 4302.

Exterior walls shall be of wood or incombustible materials. Floors and non-bearing partitions shall be of wood or incombustible materials.

Sec. 1902. Type II buildings shall not exceed a height of seventy-five (75) feet in which height there shall be not more than seven (7) stories; provided, that the height of a building erected on sloping ground shall not be less than the height of the building as measured by a vertical line equal to the vertical change in slope along the length of any side of such building but in no case shall such height exceed eighty-five (85) feet above the roof line. In buildings not exceeding one story and sixty-five (65) feet in height, the roof slopes may extend, not to exceed twenty (20) feet above the roof line.

Towers, spires and steeples erected as a part of the building and not used for habitation or storage may extend not to exceed twenty (20) feet above such height.

Area Allowable

Sec. 1903. The floor area of a Type II building shall be limited according to Occupancy as specified in Part III of this Code.

Foundations

Sec. 1904. Foundation walls and footings shall be of solid masonry as specified in Chapter 26 and 29, and shall be designed as specified in Sections 2306 and 2802.

Exterior and Inner Court Walls

Sec. 1905. All exterior walls, fire walls and fire division walls shall be of masonry or reinforced concrete as specified in Chapter 29 and shall be of not less than four hour fire-resistive construction as specified in Section 4302.

Inner court walls shall be of masonry or reinforced concrete of not less than three hour fire-resistive construction as specified in Section 4302. Partitions shall be of wood or incombustible materials. Floors and non-bearing partitions shall be of wood or incombustible materials.

Partitions

Sec. 1906. Interior partitions shall be of one-hour fire-resistive construction as specified in Section 4302 or may be of solid wood construction of not less than two (2) inch nominal thickness and of two-inch nominal tongued and grooved wood planking or of solid wood laminated construction not less than three and five-eighths (3 5/8) inches thick.

Partitions shall be constructed the same as exterior walls, or shall be of not less than four (4) inch solid wood, or of solid wood construction, protected on the weather side thereof by approved incombustible materials.

Partitions

Sec. 1907. Enclosures for elevator shafts, vent shafts, stair wells and other vertical openings, when required because of occupancy in Part III, shall be of two-hour fire-resistive construction as specified in Chapter 30 and 42; provided, that in buildings not more than three (3) stories in height which are completely sprinkled as specified in Chapter 33, such enclosure walls may be of any construction permitted for interior walls.

A parapet wall or hand rail at least thirty (30) inches in height above the roof shall be provided around all open shaft enclosures extending through the roof.

Structural Framework

Sec. 1908. The structural frame shall be of reinforced concrete as specified in Chapter 26, steel construction as specified in Chapter 27, or of solid wood construction as specified in Chapter 28.

Where wood members, such as studs, joists and girders, are directly supported, one above the other, (no girders or bolsters between columns) and shall be provided with steel or cast iron caps or purlins shall be thoroughly fireproofed, and all horizontal members are framed into such columns. No wood studs shall be less than six (6) inches nominal in its least dimension and no beam, girder or joist shall be less than six (6) inches nominal in its least dimension nor less than forty-eight (48) inches nominal in thickness with cross-sectional area.

Fireproofing of Structural Members

Sec. 1909. (a) All structural steel or iron members (not including frames and structural members for elevators and elevator enclosures) shall be thoroughly fireproofed with not less than three-hour fire-resistive protection for columns, and two-hour fire-resistive protection for beams, girders and floor systems, and all fireproofing shall be as specified in Chapter 43.

Exceptions: (1) The thickness of the fireproofing on the outer edge of lugs or brackets on columns may be reduced to not less than one (1) inch.

(2) The masonry over window openings may be supported by a steel plate, angle or similar member which is not fireproofed on the under side, provided the member is supported at proper intervals from a structural beam or girder which is fireproofed on all sides. For openings in masonry bearing walls not exceeding four (4) feet in width, an angle or similar member supported by masonry and not fireproofed on the under side may be used.

(3) Where the structural steel framework of the roof of a Group A, B or C building is more than fifteen (15) feet and less than twenty-five (25) feet above any floor or balcony, the roof construction shall be protected by a suspended ceiling of not less than two-hour fire-resistive construction as specified in Chapter 43, and such ceiling shall be not less than six (6) inches distant from any part of such roof construction.

(b) Wood structural members shall not be required to be fireproofed, but in any case shall masonry or reinforced concrete walls be supported on wood beams.

(c) All reinforced concrete columns shall be thoroughly fireproofed with not less than three-hour fire-resistive protection and all floors, beams, girders and slabs shall be thoroughly fireproofed with not less than two-hour fire-resistive protection outside of all steel reinforcing as specified in Section 4303.

Floor Construction

Sec. 1910. Floor construction shall be as specified for Type I buildings or shall be of one of the types noted below:

(1) A suspended ceiling of not less than two (2) inch nominal thickness of lumber not less than two (2) inch nominal in thickness with a top layer of flooring of one (1) inch nominal in thickness laid thereon.

(2) Construction of solid lumber placed on edge and securely spiked together to make a floor not less than four (4) inches nominal in thickness.

If such floor is six (6) inches nominal or more in thickness the lumber shall be air seasoned or kiln dried.

A space of one-half (1/2) inch shall be required between all floor construction and the wall which it adjoins, to allow for swelling in case the floor becomes wet. This space shall be properly covered by molding or arranged that it will not interfere with the swelling and shrinking movements of the flooring.

Wood joists, beams and girders supported by masonry walls shall be anchored thereto as specified in Section 2506.

Roof Construction

Sec. 1911. Roof construction shall be as specified for floor construction in Section 1910 except that the minimum allowable thickness shall be two and one-half (2 1/2) inches nominal, the timbers and planking shall be self-releasing at end support on walls and no planking or timber shall extend through fire, party or division walls. Wood joists, beams, girders and rafters supported by masonry walls shall be anchored thereto as provided in Section 2508.

Roof covering shall be a "Fire-Retardant" roofing as specified in Section 4305 and shall be required over all combustible roof construction.

Stair Construction

Sec. 1912. Stair construction shall be of wood in buildings, not exceeding three (3) stories in height.

In buildings four (4) or more stories in height all stairs and stair construction shall be as required for Type I buildings.

All stairs and exits shall be designed and constructed as specified in Chapter 33 and as specified under Occupancy in Part III.

Doors and Windows

Sec. 1913. (a) Doors, windows and other openings in the exterior walls shall be protected by one-hour fire-resistive construction as specified in Section 4304.

Exceptions: (1) The provisions of this Section shall not apply to doors, windows and other openings which face directly upon, and are not within fifty (50) feet in Fire Zone No. 1 or are not within thirty (30) feet in Fire Zones No. 2, 3 and 4, of the opposite side of a public street or other public place, this distance to be measured at right angles to the plane of the wall in which such openings occur.

(2) The provisions of paragraph (a) shall not apply to openings in an outer court twenty (20) feet or more in width parallel to and facing upon a street or public place, provided such openings are not within twenty (20) feet of an adjacent property line.

Projections from the Buildings

Sec. 1914. Bays, oriels and similar projections shall be constructed of incombustible materials with walls, floors and roof as specified in this Chapter and in Chapter 35.

Porches and exterior balconies shall be constructed of incombustible materials but structural steel or iron members need not be fireproofed; provided, that loading platforms for warehouses, freight depots and other similar buildings may be of heavy timber construction with wood floors not less than one and five-eighths (1 5/8) inches thick. Such wood construction shall not be carried through the exterior walls of any Type II building.

Cornices, marquees and similar appendages which are a part of a Type II building shall be constructed of substantial incombustible materials and as specified in Chapter 45.

Penthouses and Skylights

Sec. 1915. Penthouses shall be as required for Type I construction or shall be constructed with two-hour fire-resistive construction as specified in Chapters 36 and 43.

Skylights shall be of one-hour fire-resistive construction as specified in Chapters 34 and 43.

Combustible Materials Regulated

Sec. 1916. No wood lath or wood furring shall be allowed in any building of Type II Construction, but unprotected steel or iron or wood will be allowed in the following places:

(1) Mezzanine floors may be of wood or unprotected steel, provided that there shall be not more than two such mezzanines in any room of any building, and provided, further, that no such mezzanine floor or floors shall cover more than thirty-three and one-third (33 1/3) per cent of the area in the room where located.

(2) Show window frames and aprons, also show cases and other appendages on the first floors of stores and other similar buildings may be of wood with or without unprotected steel or iron.

(3) Trim, hand rails, show window backing and temporary partitions as specified in Section 1906, picture molds, chair rails and wainscoting or baseboards may be of wood. Wood doors may be used in buildings where specifically prohibited under Occupancy in Part III.

CHAPTER 20—TYPE III BUILDINGS (Ordinary Masonry)

Definition

Sec. 2001. "Type III" or "Type III Buildings." The interior load bearing construction may be masonry or reinforced concrete walls or floors, or of steel, or of heavy timber, or of other heavy incombustible materials may be used for the finish of such treads and risers. Partitions, floors and roof framing may be of wood.

Height Allowable

Sec. 2002. Type III buildings shall not exceed a height of fifty-five (55) feet in which height there shall be not more than five (5) stories; provided, that the height of a building erected on sloping ground may be fifty-five (55) feet plus a vertical distance equal to the vertical change in slope along the length of any side of such building but in no case shall such height exceed sixty-five (65) feet above the adjacent finished ground level; and provided, further, that towers, spires and steeples erected as a part of the building and not used for habitation or storage may extend not to exceed fifteen (15) feet above such height limit.

Area Allowable

Sec. 2003. The floor area of a Type III building shall be limited according to Occupancy as specified in Part III.

Foundations

Sec. 2004. Foundation walls and footings shall be of solid masonry as specified in Chapter 26 and 29, and shall be designed as specified in Sections 2306 and 2802.

Exterior and Inner Court Walls

Sec. 2005. All exterior walls, fire walls and fire division walls shall be of masonry or reinforced concrete as specified in Chapter 29 and shall be of not less than four-hour fire-resistive construction as specified in Section 4302.

Inner court walls and all other walls not forming the exterior walls of the building may be constructed as required for Type I or Type II buildings, or shall be of not less than one-hour fire-resistive construction as specified in Section 4302.

All walls within five (5) feet of adjacent property lines (except property lines abutting a street or alley) and all walls within ten (10) feet of adjacent property lines shall be designed and erected as specified in Chapter 26 for reinforced concrete, Chapter 27 for steel and iron, and Chapter 28 for wood.

Partitions shall be of masonry or reinforced concrete as specified in Chapter 29 and shall be of not less than four-hour fire-resistive construction as specified in Section 4302. Partitions shall be of wood or incombustible materials. Floors and non-bearing partitions shall be of wood or incombustible materials.

Partitions

Sec. 2006. Partitions of wood shall be constructed as required for Type I buildings, or shall be of one-hour fire-resistive construction as specified in Chapter 43 and in Section 4302.

Exceptions: Partitions dividing portions of stores, offices, or similar places occupied by one tenant only may be constructed of wood panels or similar light construction up to three-fourths (3/4) of the height of the room in which placed; when more than three-fourths (3/4) of the height of the room, such partitions shall have not less

(b) Shingles or Shakes. Shingles or shakes may be used for the exterior wall covering when applied as follows: The outside face of the studs shall be first sheathed with board of uniform thickness not less than twenty-five thirty-seconds (25/32) of an inch thick and such sheathing shall be securely nailed to the studs with not less than two (2) eight penny (8d) common nails to each stud in each piece of sheathing eight (8) inches or less in width and not less than three (3) such shingles or shakes shall be applied over such sheathing as specified for roofs in Section 4305.

(c) Stucco. Stucco shall be applied as provided by the Planning Ordinance of the City of Richmond.

Guniting, as defined in Chapter 26, shall be applied in not less than two (2) coats, and shall be reinforced as specified for "stucco" in this Section. The stucco shall be not less than three-fourths (3/4) of an inch in thickness on one or two story buildings and not less than one (1) inch in thickness on three story buildings.

(d) Masonry Veneer. In all cases before applying masonry veneer a substantial stationary construction shall be provided, the weight not less than fourteen (14) pounds per one hundred (100) square feet shall be applied weatherboard fashion directly over the studs, sheathing or backing as specified for "stucco" under part (c) of this Section, except that as wire need be stretched back of such paper.

Masonry veneer shall be not less than two and one-half (2 1/2) inches thick for one story only, and not less than four (4) inches thick for more than one story. The masonry shall be bonded to the studs by means of corrugated galvanized iron twenty-four (24) gauge strips or twenty penny (20p) nails, in both cases not more than sixteen (16) inches apart horizontally and twelve (12) inches apart vertically. Such veneer shall not be permitted above two stories, except for gables. The veneer shall be supported directly on the foundation.

(e) Galvanized Iron. Galvanized iron not less than twenty-eight (28) gauge may be used on stud walls without sheathing. Walls shall be effectively braced and nailing strips shall be placed in such manner as to permit the metal to be nailed at vertical intervals of not more than four (4) feet.

Interior Partitions

Sec. 2206. All interior partitions shall be constructed, framed and fire stopped as required for exterior walls as specified in Section 2205, except that exterior partitions may have a single top plate, and except that where non-bearing partitions are approximately parallel and not more than four (4) feet apart, two inch by three inch (2"x3") studs sixteen (16) inches on centers, may be used.

Floor Construction

Sec. 2207. Girders shall be designed to support the loads imposed thereon, but shall be not less than four inches by four inches (4"x4") for spans of five (5) feet or less, or not less than four inches by six inches (4"x6") (placed on edge) for spans not more than seven (7) feet.

The following table gives the maximum allowable spans for floor joists of Douglas fir (Oregon pine) common grade, based on a forty (40) pound per square foot uniformly distributed live load.

Size of Joists (Inches)	Spacing of Joists, Center to Center (Inches)	Maximum Allowable Span (Feet and Inches)	
		Plastered Ceiling Below	Without Plastered Ceiling Below
2 x 6	12	10-0	12-0
	16	9-1	10-6
	24	8-0	8-7
2 x 8	12	13-3	15-11
	16	12-1	13-11
	24	10-8	11-5
2 x 10	12	16-8	19-11
	16	15-3	17-4
	24	13-5	14-5
2 x 12	12	20-1	23-11
	16	18-5	20-11
	24	16-2	17-5
2 x 14	12	23-5	27-8
	16	21-5	24-4
	24	18-11	20-3
3 x 6	12	11-8	15-0
	16	10-8	13-1
	24	9-4	10-10
3 x 8	12	15-4	19-8
	16	14-0	17-4
	24	12-4	14-4
3 x 10	12	19-3	24-7
	16	17-8	21-8
	24	15-7	18-0
3 x 12	12	23-1	29-4
	16	21-3	25-11
	24	18-9	21-8
3 x 14	12	26-11	30-0
	16	24-10	30-0
	24	22-1	25-2

Joists of other grades, other woods and other sizes may be used, in which case they shall not be stressed to exceed the maximum allowable fiber stress as specified in Chapter 25.

Floor joists shall have a clearance of not less than twelve (12) inches between the bottom of the joists and the surface of the ground underneath.

Joists under bearing partitions shall be installed as specified in Section 2506(1). All joists, beams and girders shall be framed away at least two (2) inches from all flues and chimneys and at least four (4) inches from the back of fireplace. All wood floor joists having a span of more than eight (8) feet shall have bridging as specified in Section 2506(4k).

Solid blocking not less than two (2) inches in thickness and the full depth of the joists shall be provided in the following places: over all girders except when not called on the under side of joists, bearing walls, bearing partitions and around all stairways or other vertical openings. Such solid blocking shall serve as the required bridging specified in Section 2506(4k).

Trimmers and header joists more than four (4) feet long shall be doubled. Header joists over six (6) feet long and tail joists over twelve (12) feet long shall be hung in stirrups or metal joist hangers. Header beams shall be placed not closer than eighteen (18) inches from the face of a fireplace. All spaces between chimneys and wood joists or beams shall be filled with loose incombustible materials placed on an incombustible support or a metal collar connected to the chimney and fastened to the joists, beams or flooring to form an effective fire stop.

All joists shall have a minimum bearing of two (2) inches except when supported on a ribbon board and nailed securely to the adjoining stud.

Cutting of wood girders, beams or joists shall be limited to that permitted in Section 2506(4).

Roof and Ceiling Construction

Sec. 2208. The following table gives the maximum allowable span for Douglas fir (Oregon pine) common grade, ceiling joists and roof rafters.

Size of Joists (Inches)	Spacing of Joists, Center to Center (Inches)	Maximum Allowable Span (Feet and Inches)	
		For Ceiling Joists	For Roof Rafters
2 x 4	12	11-0	10-4
	16	10-0	9-0
	24	8-11	7-5
2 x 6	12	16-7	15-8
	16	15-4	13-9
	24	13-8	11-5
2 x 8	12	21-8	20-8
	16	20-2	18-2
	24	18-0	15-1
2 x 10	12	26-10	25-9
	16	25-0	22-9
	24	22-6	18-10
2 x 12	12	30-0	28-0
	16	28-0	25-0
	24	25-0	22-0

Joists or rafters of other grades, other woods and other sizes may be used, in which case they shall not be stressed to exceed the maximum allowable fiber stress as specified in Chapter 25.

The allowable span of roof rafters shall be measured from plate to ridge, except that where rafters are braced to ceiling joists, and a complete truss is formed, to the satisfaction of the Building Inspector, the span shall be considered as the distance between intersecting points of trussing, when the allowable stresses are not exceeded.

Roof framing and trussing shall be thoroughly and effectively angle braced. Roof joists when supported on a ribbon board shall be well nailed to the stud.

Roof spaces shall be subdivided by a tightly fitted partition of matched wood or approved incombustible materials extending from the ceiling to the roof sheathing, so located as to subdivide this space into areas not exceeding twenty-five hundred (2500) square feet. All openings in such partitions shall have self-closing doors or equally effective devices to provide effective resistance to the passage of flames and gases.

Roof Covering

Sec. 2209. Roof covering "Fire Retardant" roofing, except that for Groups H, I and J buildings an ordinary roofing may be used as specified in Section 4305. Wherever a composition roofing is used, the roof construction shall be solidly sheathed with wood, sheathing to be not less than one (1) inch nominal thickness.

Enclosure of Vertical Openings

Sec. 2210. Enclosure walls for elevator shafts, vent shafts, stair wells and similar vertical openings through a building shall be of not less than one hour fire-resistive construction as specified in Chapters 30 and 43 and where required under Occupancy in Part III, except that for Groups H, I and J buildings an ordinary construction may be used. The roof construction shall be solidly sheathed with wood, sheathing to be not less than one (1) inch nominal thickness.

General

Sec. 2211. Other parts of Type V buildings may be constructed of wood or shall be constructed of approved combustible or incombustible

materials, and all such wood construction shall be as specified in Chapter 25. The carrying capacity of all members shall be calculated by the accepted principles of mechanics. The actual dimensions of timbers shall be used and not the nominal sizes in computations for stress and deflection.

Combustible insulating materials may be placed in partitions, floor or roof framing but shall in no way interfere with the fire blocking or fire separations required by this code.

In all buildings heretofore constructed and in all existing buildings, no wall paper or cloth lining shall be applied to any wall or ceiling surface unless said surface has first been plastered or sealed with an approved plaster board.

PART VI

ENGINEERING REGULATIONS, QUALITY AND DESIGN OF THE MATERIALS OF CONSTRUCTION

CHAPTER 23—LIVE AND DEAD LOADS

Definitions

Sec. 2301. Dead Load. The dead load of a building shall include the weight of all permanent parts, partitions, framing, floors, roofs and all other permanent stationary construction entering into and becoming a part of a building. (See table in Appendix at end of Code for weights of construction materials.)

Live Load. The live load is that load except dead loads.

General

Sec. 2302. (a) Loads. Buildings and all parts thereof shall be of sufficient strength to support the estimated or actual imposed dead and live loads in addition to their own dead load, without exceeding the stresses noted elsewhere in this Code, provided no building or part thereof shall be designed for live loads less than those specified in the following table. Important shall be considered in the design of any structure where impact loads occur.

(b) Design. Any system or method of construction to be used shall be the result of a rational analysis in accordance with well established principles of mechanics.

Special Load Considerations

Sec. 2303. (a) Provision shall be made in designing office floors for load of two thousand (2000) pounds placed upon any space two and one-half (2 1/2) feet square, wherever this load upon an otherwise uniformly distributed load of fifty (50) pounds per square foot.

(b) Corridors in dwellings shall be designed for not less than forty (40) pounds per square foot.

(c) In designing floors to be used for industrial or commercial purposes the actual live load caused by the use to which the building or part of the building is to be put, shall be used in the design of such floors or part thereof.

(d) Floors in office buildings and in other buildings subject to shifting loads without reference to arrangement of floor beams or girders shall be designed to support in any position a single partition of the type used in the building placed in any position.

(e) Public garages and commercial or industrial buildings in which loaded trucks are placed or stored shall have the floor systems designed to support a concentrated rear wheel load of a loaded truck placed in any possible position.

Unit Live Loads

Sec. 2304. The following unit live loads shall be taken as the minimum live loads in pounds per square foot to be used in the design of buildings for the occupancies listed, and loads at least equal shall be assumed for uses not listed in this Section but which create or accommodate similar loads.

Apartment	40	Armories	150
Auditoriums—Fixed Seats	50	Auditoriums—Movable Seats	100
Balconies and Galleries—Fixed Seats	100	Balconies and Galleries—Movable Seats	100
Drill Rooms	100	Dwellings	100
Escapes	100	Exterior Balconies	100
Garages	100	Gymnasiums	100
Hospitals—Wards and Rooms	40	Hotels—Guest Rooms and Private Corridors	100
Libraries—Reading Rooms	60	Libraries—Stack Rooms	125
Manufacturing—Light	75	Manufacturing—Heavy	100
Marquees	60	Marquees	60
Prattling Plants—Production	100	Prattling Plants—Composing and Linotype Rooms	100
Rest Rooms	100	Reviewing Stands and Elephants	100
Roof Loads	100	Schools—Class Rooms	40
Sidewalks—800 lbs. Concentrated or	100	Skating Rinks	100
Storage—Light	125	Storage—Heavy (Load to be determined from proposed use or occupancy, but never less than)	250
Stores—Retail (Light Merchandise)	75	Stores—Wholesale (Light Merchandise)	100
Wholesale (Light Merchandise)	100		

Roof Loads

Sec. 2305. Roofs having a rise of four (4) inches or less per foot of horizontal projection shall be designed for a vertical live load of thirty (30) pounds per square foot, or horizontal projection applied to any or all slopes. Roofs with a rise of more than four (4) inches, and not more than twelve (12) inches per foot shall be designed for a vertical live load of twenty-five (25) pounds per square foot, or horizontal projection applied to any or all slopes. If the rise exceeds twelve (12) inches per foot no vertical live load need be assumed but a wind force of twenty (20) pounds per square foot of such surface acting normal to the roof surface for one slope at a time shall be assumed.

Reduction of Live Loads

Sec. 2306. The following reductions in assumed live loads shall be permitted in designing of columns, piers, walls, foundations, trusses and girders.

(1) No reduction of the assumed live load shall be allowed in the design of any slabs, joists or beams.

(2) A reduction of live load may be made in the design of girders based on a certain tributary floor area, shall be permitted as noted in the following schedule. This reduction shall not be carried into the columns nor shall such reduction be used in design of buildings to be used or occupied as warehouses or for storage purposes.

(3) For determining the total live loads carried by columns the following reductions shall be permitted:

(4) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

Wind Pressure

Sec. 2307. For purposes of design the wind pressure upon all vertical plane surfaces of all buildings and structures, shall be taken at not less than ten (10) pounds per square foot for those portions of the building less than forty (40) feet above ground and at not less than twenty (20) pounds per square foot for those portions more than forty (40) feet above ground.

The wind pressure upon chimneys, tanks, sky signs, or other similar exposed structures and their supports shall be taken at not less than thirty (30) pounds per square foot of the gross area of the plane surface, acting in any direction. In calculating the wind pressure on circular towers or stacks the wind pressure shall be assumed to act on six-tenths (6/10) of the projected area.

Where it shall appear that a building or structure is to be constructed in a location where it will be exposed to the full force of the wind throughout its entire height, the wind pressure on all vertical surfaces thus exposed shall be taken at not less than twenty (20) pounds per square foot.

The wind pressure upon the roof of a building shall be determined on the basis of the total live load plus the dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(4) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(5) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(6) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(7) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(8) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(9) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(10) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(11) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(12) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(13) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(14) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(15) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(16) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(17) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(18) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(19) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(20) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(21) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained the dead load soil pressure of such footing shall be determined and the areas of all other footings of the building shall be determined on the basis of their respective dead loads only and such dead load soil pressure. The total reduced live load per square foot under any portion of any footing, due to the combined dead, live, wind and/or any other loads, exceed the safe sustaining power of the soil upon which the footing rests. The total reduced live load per square foot shall be determined immediately above the footing shall be the live load used in the above computation.

(22) The base area of the footings of the building shall be designed in the following manner: The area of the footing which has the largest percentage of live load to total load shall be determined by dividing the total live load by the total area of the footings. From the area thus obtained

	GYPSUM FIBER CONCRETE with not more than 12 1/2 per cent of wood chips, excelsior or fiber		GYPSUM COARSE AGGREGATE CONCRETE
	NEAT GYPSUM		
Extreme fiber stress in compression in flexure	350	125	125
Direct compression or bearing	200	100	100
Bond between gypsum and reinforcing	40	30	30
Shearing Stress	30	20	20
Modulus of elasticity in lbs. per square inch	1,000,000	200,000	200,000
Ration of modulus of elasticity of steel to that of gypsum (n).	30	150	150

(e) Hollow tile. The maximum allowable compressive stresses in masonry of hollow tile, due to combined live and dead loads, shall not exceed eighty (80) pounds per square inch of the gross cross-sectional area, when laid with Portland cement mortar, and seventy (70) pounds per square inch of gross cross-sectional area when laid with lime-cement mortar.

(f) Stone. The maximum allowable compressive stresses in rubble masonry, due to combined live and dead loads, shall not exceed one hundred and forty (140) pounds per square inch when laid in Portland cement mortar, nor one hundred (100) pounds per square inch in lime-cement mortar.

The maximum allowable compressive stress in ashlar masonry due to combined live and dead loads shall not exceed the following limits:

Unit	Maximum Unit Working Stresses (pounds per square inch) laid in	
	Lime Cement Mortar	Portland Cement Mortar
Granite	640	800
Limestone	400	600
Marble	400	500
Sandstone	320	400

General Requirements

Sec. 2411. The effects of eccentric loads and lateral forces shall be fully analyzed and allowances made for them in design. Concentrated loads shall be distributed so as not to exceed the allowable working stresses as specified in Section 2410 by more than twenty-five (25) per cent.

CHAPTER 25 - WOOD (Quality and Design)

General

Sec. 2501. The quality and design of all wood used in the construction of all buildings or parts of buildings shall conform to the minimum standards as specified in this chapter. All members shall be so framed, anchored, tied and braced together as to develop to maximum strength and rigidity necessary for the purpose for which they are used. No member shall be stressed in excess of the strength of its details and connections. Workmanship in fabrication, preparation and installation of material shall conform to good engineering practice.

Sec. 2502. All wood structural members shall be of sufficient size and strength to carry their loads safely without exceeding the allowable working stresses as specified in Sections 2503 and 2504.

In computations to determine the required size of timber members the net cross sectional area or actual size shall be used and not the nominal size. Sizes required by this Code shall be deemed to refer to the nominal or commercial description of size unless stated in fractional minimum and American standard dressed sizes shall be accepted as conforming therewith.

Sec. 2503. Lumber used for load supporting purposes, when equivalent in quality to the Basic Provisions of American Lumber Standards, Department of Commerce, July, 1926, shall have its safe carrying capacity determined by the working stresses in pounds per square inch of cross sectional area as given in Tables I, II, III, IV, V and VI for the respective grades and locations of use indicated. For lumber of other grades or of quality intermediate between the basic grades, proportional values for working stresses may be interpolated at the discretion of the Building Inspector.

Lumber of select structural grades may be required to be grade marked or accompanied by a grade certificate.

The allowable stresses given in this Section may be increased not to exceed thirty-three and one-third (33 1/3) per cent for dead and/or live loads alone, with wind and/or other loads, provided the resulting stresses are not less than those required for dead and/or live loads alone.

The allowable stress in compression across the grain may be increased fifty (50) per cent above that specified in the Section for joists supported on a ribbon board and spiked to the adjoining stud.

Douglas Fir (Oregon Pine) conforming in quality to the select grade provisions with the exception of the rate of growth requirements shall have the allowable stress in extreme fiber in bending and compression parallel and perpendicular to the grain reduced one-sixteenth (1/16) of the values given in the following tables for each ratio of unsupported length to least dimension.

For columns with L/d intermediate between those which are given in these tables, the safe loads in pounds per square inch may be determined by interpolation.

For columns with L/d greater than those given in these tables, the safe loads in pounds per square inch may be determined by interpolation.

Round Columns. The value in the table for wood columns may be applied to round columns by reducing the column to an equivalent square timber, the side of the square being taken as seven-eighths (7/8) of the diameter measured one-third of the length from the small end. The crushing strength of the small end shall in no case exceed the allowable stress for a short column.

Working stress in the following tables are given for three (3) conditions of exposure during use: (a) continuously Dry Locations, (b) Occasionally Wet but quickly dried, (c) more or less continuously damp or usually Wet. The Building Inspector shall determine the values to be used for the existing or proposed conditions of exposure, defined as follows:

(a) Continuously Dry Locations shall apply to use in interior or protected construction, not subject to conditions of excessive dampness or high humidity.

(b) Occasionally Wet but quickly dried shall apply to use in exterior structures as bridges, trestles, grand stands or bleachers, and exposed framework of open structures.

(c) More or less continuously damp or usually Wet shall apply to use where material is exposed to waves of tide water or in contact with earth or used in a building in portions that would be more or less continuously wet.

Species	Safe Load in Pounds per Square Inch of Cross Sectional Area of Square and Rectangular Timber Columns Used in Dry Locations									
	Grade	10 or less	12	14	16	18	20	25	30	35
Cedar, Western Red	Select	700	685	674	656	629	592	532	438	304
Cedar, Port. Oregon	Common	560	553	547	538	524	505	425	350	224
Douglas Fir, Coast Region	D. Select	1251	1222	1176	1112	1022	972	702	487	175
Douglas Fir, Rocky Mountain Region	Select	1175	1149	1093	1045	975	702	487	358	274
Hemlock, West Coast	Common	881	870	861	847	826	796	675	565	413
Hemlock, West Coast	Select	800	786	774	753	726	688	526	365	268
Larch, California	Common	640	632	627	617	602	582	500	420	313
Larch, California	Select	600	593	587	577	562	542	460	380	283
Pine, California	Common	560	553	547	538	524	505	425	350	224
Pine, California	Select	500	493	487	477	462	442	360	280	203
Redwood, Siskiyou	Common	640	632	627	617	602	582	500	420	313
Redwood, Siskiyou	Select	600	593	587	577	562	542	460	380	283
Spruce, Engelmann	Common	560	553	547	538	524	505	425	350	224
Spruce, Engelmann	Select	500	493	487	477	462	442	360	280	203

Species	Allowable Unit Stresses for Structural Lumber and Timber Exposed Locations Usually Wet									
	Grade	10 or less	12	14	16	18	20	25	30	35
Cedar, Western Red	Select	710	695	680	660	630	590	530	430	300
Cedar, Port. Oregon	Common	560	553	547	538	524	505	425	350	224
Douglas Fir, Coast Region	D. Select	1370	1340	1290	1220	1130	1080	810	540	200
Douglas Fir, Rocky Mountain Region	Select	1300	1270	1220	1150	1060	1010	740	470	170
Hemlock, West Coast	Common	880	870	860	845	825	795	675	565	415
Hemlock, West Coast	Select	800	790	780	765	745	715	595	485	335
Larch, California	Common	600	590	580	565	545	515	435	355	245
Larch, California	Select	550	540	530	515	495	465	385	305	215
Pine, California	Common	560	553	547	538	524	505	425	350	224
Pine, California	Select	500	493	487	477	462	442	360	280	203
Redwood, Siskiyou	Common	600	590	580	565	545	515	435	355	245
Redwood, Siskiyou	Select	550	540	530	515	495	465	385	305	215
Spruce, Engelmann	Common	560	553	547	538	524	505	425	350	224
Spruce, Engelmann	Select	500	493	487	477	462	442	360	280	203

Species	Allowable Unit Stresses for Structural Lumber and Timber Exposed Locations Usually Wet									
	Grade	10 or less	12	14	16	18	20	25	30	35
Cedar, Western Red	Select	670	655	640	620	590	550	490	390	270
Cedar, Port. Oregon	Common	520	513	507	498	484	465	385	305	215
Douglas Fir, Coast Region	D. Select	1090	1060	1010	940	850	800	530	260	100
Douglas Fir, Rocky Mountain Region	Select	1010	980	930	860	770	720	450	180	80
Hemlock, West Coast	Common	840	830	820	805	785	755	635	525	375
Hemlock, West Coast	Select	760	750	740	725	705	675	555	445	295
Larch, California	Common	580	570	560	545	525	495	415	335	245
Larch, California	Select	530	520	510	495	475	445	365	285	195
Pine, California	Common	540	530	520	505	485	455	375	295	205
Pine, California	Select	480	470	460	445	425	395	315	235	145
Redwood, Siskiyou	Common	580	570	560	545	525	495	415	335	245
Redwood, Siskiyou	Select	530	520	510	495	475	445	365	285	195
Spruce, Engelmann	Common	540	530	520	505	485	455	375	295	205
Spruce, Engelmann	Select	480	470	460	445	425	395	315	235	145

Species	Columns-Allowable Unit Stresses									
	Grade	10 or less	12	14	16	18	20	25	30	35
Cedar, Western Red	Select	680	665	650	630	600	560	500	400	280
Cedar, Port. Oregon	Common	530	523	517	508	494	475	395	315	225
Douglas Fir, Coast Region	D. Select	1100	1070	1020	950	860	810	540	270	110
Douglas Fir, Rocky Mountain Region	Select	1020	990	940	870	780	730	460	190	80
Hemlock, West Coast	Common	860	850	840	825	805	775	655	545	395
Hemlock, West Coast	Select	780	770	760	745	725	695	575	465	315
Larch, California	Common	600	590	580	565	545	515	435	355	265
Larch, California	Select	550	540	530	515	495	465	385	305	215
Pine, California	Common	560	553	547	538	524	505	425	350	224
Pine, California	Select	500	493	487	477	462	442	360	280	203
Redwood, Siskiyou	Common	600	590	580	565	545	515	435	355	245
Redwood, Siskiyou	Select	550	540	530	515	495	465	385	305	215
Spruce, Engelmann	Common	560	553	547	538	524	505	425	350	224
Spruce, Engelmann	Select	500	493	487	477	462	442	360	280	203

Species	Safe Load in Pounds per Square Inch of Cross Sectional Area of Square and Rectangular Timber Columns Used in Dry Locations									
	Grade	10 or less	12	14	16	18	20	25	30	35
Cedar, Western Red	Select	700	685	674	656	629	592	532	438	304
Cedar, Port. Oregon	Common	560	553	547	538	524	505	425	350	224
Douglas Fir, Coast Region	D. Select	1251	1222	1176	1112	1022	972	702	487	175
Douglas Fir, Rocky Mountain Region	Select	1175	1149	1093	1045	975	702	487	358	274
Hemlock, West Coast	Common	881	870	861	847	826	796	675	565	413
Hemlock, West Coast	Select	800	786	774	753	726	688	526	365	268
Larch, California	Common	640	632	627	617	602	582	500	420	313
Larch, California	Select	600	593	587	577	562	542	460	380	283
Pine, California	Common	560	553	547	538	524	505	425	350	224
Pine, California	Select	500	493	487	477	462	442	360	280	203
Redwood, Siskiyou	Common	640	632	627	617	602	582	500	420	313
Redwood, Siskiyou	Select	600	593	587	577	562	542	460	380	283
Spruce, Engelmann	Common	560	553	547	538	524	505	425	350	224
Spruce, Engelmann	Select	500	493	487	477	462	442	360	280	203

Species	Safe Load in Pounds per Square Inch of Cross Sectional Area of Square and Rectangular Timber Columns Used in Locations Occasionally Wet but Quickly Dry									
	Grade	10 or less	12	14	16	18	20	25	30	35
Cedar, Western Red	Select	700	685	674	656	629	592	532	438	304
Cedar, Port. Oregon	Common	560	553	547	538	524	505	425	350	224
Douglas Fir, Coast Region	D. Select	1165	1139	1083	1036	967	917	647	377	151
Douglas Fir, Rocky Mountain Region	Select	1065	1045	1024	1003	968	915	645	375	149
Hemlock, West Coast	Common	800	792	784	773	758	736	644	532	380
Hemlock, West Coast	Select	720	712	703	692	673	652	560	448	296
Larch, California	Common	600	592	584	573	558	536	444	332	240
Larch, California	Select	540	532	524	513	498	476	384	272	180
Pine, California	Common	560	552	544	533	518	496	404	292	200
Pine, California	Select	500	492	484	473	458	436	344	232	140
Redwood, Siskiyou	Common	600	592	584	573	558	536	444	332	240
Redwood, Siskiyou	Select	540	532	524	513	498	476	384	272	180
Spruce, Engelmann	Common	560	552	544	533	518	496	404	292	200
Spruce, Engelmann	Select	500	492	484	473	458	436	344	232	140

TABLE VI Safe Load in Pounds per Square Inch of Cross Sectional Area of Square and Rectangular Timber Columns Used in Locations, Usually Wet but Quickly Dry												
Ratios of Length to Least Dimension (L/d)												
Species	Grade	4	16	18	20	25	30	35	40	50	Species	Grade
Cedar, Western Red	Select	29	29	614	594	565	437	{ 304	224	171	110	Comm.
Douglas Fir, Coast Region	Select	51	940	910	871	698	487	{ 358	274	175	Comm.	
Douglas Fir, Rocky Mountain Region	Select	33	867	846	814	683	487	{ 358	274	175	Comm.	
Douglas Fir, Rocky Mountain Region	Select	31	669	651	623	514	{ 365	268	206	132	Comm.	
Hemlock, West Coast	Select	51	544	535	521	465	{ 426	313	240	153	Comm.	
Larch, Western	Select	80	766	745	717	600	{ 537	396	291	223	142	Comm.
Redwood	Select	27	712	690	657	525	{ 365	268	206	132	Comm.	
Spruce, Sitka	Select	38	580	568	532	483	{ 364	268	206	132	Comm.	
	Comm.	35	625	611	589	500	{ 446					Comm.
	Comm.	42	567	500	489	446						Comm.

(c) Water used in mixing concrete shall be clean and free from injurious amounts of oil, acid, alkali, organic matter or other harmful substances.

(d) Metal reinforcement shall conform to the requirements of the Standard Specifications (Serial Designation A15-14) for Billet-Steel Concrete Reinforcement Bars of structural, intermediate or hard grade or Standard Specifications (Serial Designation A16-14) for Rail-Steel Concrete Reinforcement Bars of structural, intermediate or hard grade. For Testing Materials, or Standard Specifications for Cold-Drawn Steel Wire for Concrete Reinforcement (Serial Designation A32-27) provided that hard grade billet-steel bars larger than three-fourths (3/4) inch in diameter shall not be used where bending would be required; and provided, further, that the requirement in the above mentioned specifications for machine of deformed bars shall be eliminated. Deformed bars, to receive that satisfaction, shall show a tensile strength twenty-five (25) per cent greater than that shown by plain bars of equivalent cross-sectional area.

(e) Storage of concrete and aggregates shall be in a manner to prevent deterioration or the intrusion of foreign matter. Any material which has been damaged shall be immediately and completely removed from the work.

Test of Materials

Sec. 2605. On concrete or reinforced concrete work the Building Inspector shall have the right to require the owner or his agent to make tests of materials and methods in use as such as to produce concrete or reinforced concrete of the quality specified and used in the design of the building or structure. The tests shall be made when ordered by the Building Inspector, and the owner or his agent shall be responsible and no responsibility for the expense of these tests shall attach to the Building Department. All such tests shall be made by competent persons approved by the Building Inspector, and the results shall be kept on file in the office of the Building Inspector for a period of not less than two years after the acceptance of the structure. Specimens for such tests shall be taken at the place where the concrete is being deposited and shall be taken in accordance with the Standard Method of Making and Storing Specimens of Concrete in the Field (Serial Designation C31-27) of the American Society for Testing Materials.

Quality of Concrete

Sec. 2606. Provisions for the design of structures embodied in this Chapter are based on the presumption of concrete of certain strength. To produce concrete of the required strength, the concrete must be properly controlled, and the ratios of water to cement suggested in this Section shall not apply to gunite.

The strengths of concrete indicated in the following table are the minimum ultimate strengths that may be expected of Portland cement concrete when using the tabulated ratios of water to cement and when the concrete is cured and tested as specified in this Section. The strengths shown in the table shall be the ultimate measure and determining factor. Water or moisture contained in the aggregates must be included in determining the ratio of water to cement.

Approximate Proportions of Mixing	Water-Cement Ratio (U. S. Gal. of Water per cu. yd. of Concrete)
Strengths	
(Lbs. per sq. in.)	
1,500	8 1/4
2,000	7 1/4
2,500	6 1/2
3,000	5 3/4

All structural drawings and plans submitted for approval shall show the proposed strength of concrete to be used and the water-cement ratio assumed to produce that strength, but the concrete must be placed and cured as specified in this Section, and the strength must not be less than that shown on the plans as assumed in the design.

Sec. 2607. The proportions of water to cement for concrete of any water-cement ratio shall be such as to produce concrete that will work readily into the corners and angles of the form and around the reinforcement without excessive puddling or spalling and that will mix freely with the water and cement and combined aggregates shall be of such composition of sizes that when separated by the No. 4 standard sieve, the weight retained on the sieve shall not be less than one-half (1/2) nor more than three-fourths (3/4) of the weight of the amount of coarse material to be used to produce harshness in placing or honeycombing in the structure. When forms are removed, the faces and corners of the members shall be smooth and sound throughout.

Admixtures of lime or finely pulverized inert materials may be added but not in excess of six (6) per cent by volume of the cement used.

Control of Proportions

Sec. 2608. The methods of measuring concrete materials shall be such that the composition of the concrete can be accurately controlled during the progress of the work and easily checked at any time by the Building Inspector or his authorized representative. A tolerance of one-fourth (1/4) inch in the case of water and cement and one-half (1/2) inch in the case of aggregates shall be allowed provided that the average for any ten (10) consecutive batches does not show a water content greater than that shown in the table and on plans as specified in this Section. The method of weighing the materials to be used in the work and of storing and handling shall be such that the moisture content of the aggregates as they come to the mixer shall not be subject to frequent or unnecessary changes.

Mixing and Placing Concrete

Sec. 2609. (a) Mixing. The concrete shall be mixed until there is a uniform distribution of the materials and the mix is uniform in color and homogeneous. In machine mixing, the materials shall be used. Each batch shall be mixed for a minimum of one minute after all the materials are in the mixer and must be completely discharged before the mixer is recharged. Machine mixers shall have a peripheral speed of rotation of not less than 200 revolutions per minute. (b) Cleaning Forms and Equipment. Before concrete is placed all equipment for mixing and transporting the concrete shall be cleaned. All debris shall be removed from the spaces to be filled with concrete. Concrete shall be thoroughly wetted in freezing weather, or oiled, and masonry that will be in contact with concrete shall be well drenched (except in freezing weather). Reinforcement shall be thoroughly cleaned and oiled. Concrete shall be placed and placed until the forms and reinforcement have been inspected and approved by the Building Inspector.

(c) Removal of Water From Excavations. Water shall be removed from excavations before concrete is placed, unless otherwise directed by the Building Inspector. Any flow of water into an excavation shall be diverted through proper side drains to a sump, or be removed by other approved methods which will avoid the freshly deposited concrete. Water in the form of puddles or drains shall be filled by grouting or otherwise, after the concrete has thoroughly hardened.

(d) Transporting Concrete. Concrete shall be handled from the mixer to the place of use in a manner which will not subject it to methods which shall prevent the separation or loss of the ingredients. It shall be deposited as nearly as practicable in its final position to avoid rehandling or flowing. Under no circumstances shall concrete that has attained its initial set be moved or handled.

(e) Placing. Concrete shall be thoroughly compacted with suitable tools. When necessary, openings shall be provided in the forms to permit the placing of concrete in such a manner as to avoid accumulation of concrete on the forms or reinforcing bars. The concrete shall be thoroughly worked around the reinforcement.

(f) Curing. Exposed surfaces of concrete shall be kept moist for a period of not less than seven (7) days after placement. (g) Depositing in Cold Weather. When depositing concrete at freezing or near freezing temperatures, the concrete shall be maintained at a temperature of at least fifty (50) degrees Fahrenheit. The concrete shall be maintained at a temperature of not less than fifty (50) degrees Fahrenheit for not less than seventy-two hours after placing. When necessary, concrete materials shall be heated before use and shall not be placed on soil or other materials which will prevent the prevention of freezing.

(h) Bonding Fresh and Hardened Concrete. Before new concrete is deposited on or against concrete which has attained its initial set, the surface of the set concrete shall be roughened, cleaned of foreign matter and laitance and thoroughly wetted but not saturated. The cleaned and wetted surfaces of the hardened concrete, including vertical and horizontal joints, shall be covered with a coating of cement mortar against which the new concrete shall be placed before the mortar has attained its initial set.

Sec. 2610. (a) Forms and Details of Construction. Forms shall conform to the shape, lines and dimensions of the member as called for on the plans and shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be properly braced and supported so that they will not deflect or move under the pressure of the concrete. Foundation for shores cannot be secured, trussed supports shall be provided.

Forms shall be so designed, braced and aligned as to keep the finished concrete within the limits of not more than an error of 1/16 of an inch in the height of the exterior columns or of columns adjacent to eaveys.

Temporary openings shall be provided at the base of column and wall forms, and at other points where necessary, to facilitate cleaning and inspection.

(b) Removal of Forms. Forms shall not be disturbed until the concrete has hardened. Forms shall be removed with care and safety. Shoring shall be removed until the member has acquired sufficient strength to support safely its own weight and the load upon it. Members subject to additional loads during construction shall be supported by independent bracing and shoring, and shall be constructed in a manner that will protect the member from damage.

The Building Inspector may require forms to remain in place for a specified time.

(c) Cleaning and Bending Reinforcements. Metal reinforcement before being placed shall be thoroughly cleaned of loose mill and rust scale and of other coatings that will destroy or reduce the bond. Reinforcement shall be carefully formed, and the shape indicated on the plans. Cold bends shall be made around a pin having a diameter of not less than four times the least dimension of the bar.

Metal reinforcement shall not be bent, twisted or handled in a manner that will produce sharp bends or kinks or bends not shown on the plans shall not be used. Heating of reinforcement will be permitted only when approved by the Building Inspector.

(d) Placing Reinforcement. Metal reinforcement shall be accurately placed and secured and shall be supported by chairs, spacers, or hangers. The minimum clear distance between parallel bars shall be one-half (1/2) inch and the clear distance between bars shall be one-half (1/2) inch. The minimum clear distance between bars and forms shall be the diameter of round bars and the diagonal of square bars. If the ends of bars are anchored in the concrete, the diameter of round bars or to the diagonal of square bars, but in no case shall the spacing between bars be less than one (1) inch, nor less than one and one-third (1 1/3) times the maximum size of the aggregate. Embedment of reinforcement shall be made equal to the length of the main longitudinal slab steel shall be spaced not more than two and one-half (2 1/2) times the diameter of the bar. The ends of the reinforcement shall be bent at an angle of not less than 45 degrees.

(e) Slices and Offsets in Reinforcement. In slabs, beams and girders, slices of reinforcement shall not be made at points of maximum stress without the approval of the Building Inspector. Where permitted, slices shall provide sufficient lap to transfer the stress between bars by bond and shear. In such slices the bars shall be spaced at the minimum distance specified in paragraph (d) of this Section.

(f) Protective Covering of Concrete. At the under side of footings, metal reinforcement shall have a minimum covering of three (3) inches of concrete. In all other cases, the reinforcement shall be protected as specified in Section 4301.

Exposed reinforcement bars intended for bonding with future extensions shall be protected from corrosion.

(g) Construction Joints. Joints not indicated on the plans shall be placed at the discretion of the Building Inspector.

(h) Construction Joints. Joints not indicated on the plans shall be placed at the discretion of the Building Inspector.

(i) Construction Joints. Joints not indicated on the plans shall be placed at the discretion of the Building Inspector.

(j) Construction Joints. Joints not indicated on the plans shall be placed at the discretion of the Building Inspector.

so made and located as to least impair the strength of the completed structure. Where a joint is to be made, any excess water or laitance shall be removed from the surface of the concrete to be deposited. Before depositing of concrete, the surface of the hardened concrete shall be treated as specified in paragraph (h) of Section 2609.

At least one hour must elapse after concrete is deposited in the columns or walls before depositing in beams, girders, or slabs supported thereon. Haunches and column capitals shall be considered as part of and to act continuously with the floor.

Construction joints in floors shall be located near the middle spans of slabs, beams or girders, unless a beam intersects a girder at this point, in which case the joints in the girders shall be offset a distance equal to twice the width of the beam. Provision shall be made for shear by use of reinforcement, inclined in both directions across the joint.

Pipes, conduits or other openings shall not be allowed in concrete columns, and shall not be allowed in other reinforced concrete structural units. Adequate provision is made for the additional stress in the concrete and reinforcing steel due to the presence of the opening. No allowance shall be made for the strength of the pipe, conduit or other unapproved metal casing in this opening.

Sec. 2611. The design of reinforced concrete members shall be based on the following assumptions:

(a) Calculations shall be made with reference to working stresses and safe loads:

(b) A plane section before bending remains plane after bending, shearing distortions being neglected.

(c) The modulus of elasticity of concrete in compression is constant within the limits of working stresses, and the distribution of compressive stress in beams is rectilinear.

(d) The maximum unit stress in concrete in compression, for the position of the neutral axis, for the resisting moment of beams and for the compression of concrete in columns, are as follows:

(1) 1/15 that of steel

(2) 1/12 that of steel

(3) 1/10 that of steel

(4) 1/8 that of steel

(5) 1/6 that of steel

(6) 1/5 that of steel

(7) 1/4 that of steel

(8) 1/3 that of steel

(9) 1/2 that of steel

(10) 2/3 that of steel

(11) 3/4 that of steel

(12) 4/5 that of steel

(13) 5/6 that of steel

(14) 2/3 that of steel

(15) 1/2 that of steel

(16) 1/3 that of steel

(17) 1/4 that of steel

(18) 1/5 that of steel

(19) 1/6 that of steel

(20) 1/7 that of steel

(21) 1/8 that of steel

(22) 1/9 that of steel

(23) 1/10 that of steel

(24) 1/11 that of steel

(25) 1/12 that of steel

(b) Span Length. The span length of freely supported beams and slabs shall be the clear span plus the depth of beam or slab but shall not exceed the distance between centers of the supports.

The span length for continuous or restrained beams built to act integrally with supports shall be the clear distance between faces of supports. For continuous or restrained beams having brackets built to act integrally with both beam and support and of a width not less than the width of the beam and making an angle of 45 deg. or more with the horizontal, the span may be measured from the section where the combined depth of the beam and bracket is at least one-third (1/3) more than the depth of the beam. No portion of such a bracket shall be considered as adding to the effective depth of the beam. Maximum negative moments are to be considered as existing at the ends of the span, as defined above.

In rectangular slabs reinforced in both directions the distribution of load shall be assumed to be inversely as the cubes of the spans.

(c) Support. The length of a beam shall not exceed twenty-four (24) times the least width of compression flange.

(d) Requirements for T-Beams. In T-beam construction the slab shall be used in the design of symmetrical T-beams shall not exceed one-fourth (1/4) of the span length of the beam, and its overhanging width on either side of the web shall not exceed eight (8) times the thickness of the slab and never more than one-half (1/2) the clear distance to the next beam.

For beams having a flange on one side only, the effective flange width to be used in the design shall be the least of the following: (1) the span length of the beam, and its overhanging width from the face of the web shall not exceed six (6) times the thickness of the slab, and never more than one-half (1/2) the clear distance to the next beam.

(2) The principal reinforcement shall be parallel to the beam, transverse reinforcement, not less in amount than three-tenths (3/10) per cent of the sectional area of the slab, shall be provided in the top of the slab and shall extend across the beam and overhang on both sides of the beam. The spacing of the bars shall not exceed eighteen (18) inches.

Provision shall be made for the compressive stress at the support in continuous beams in which the T-form is used only for purpose of providing additional compression area shall have a flange thickness not less than one-half (1/2) the width of the web and a total symmetrical flange width not less than one-half (1/2) the width of the web.

Sec. 2615. Beams and slabs of equal spans freely supported or built to act integrally with beams, girders or other structural members, which develop only partial end restraint, and carrying uniformly distributed loads, shall be designed for the following moments at critical sections:

(a) Isolated beams and slabs of one span, and supports for cases (a), (b), and (c) of this Section.

(b) Beams and slabs continuous over two spans, and supports for cases (a), (b), and (c) of this Section.

(c) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(d) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(e) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(f) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(g) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(h) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(i) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(j) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(k) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(l) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(m) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(n) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(o) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(p) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(q) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(r) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(s) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(t) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(u) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(v) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(w) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(x) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

(y) Beams and slabs continuous over more than two spans, and supports for cases (a), (b), and (c) of this Section.

The point of beginning of anchorage shall be taken at the edge of the support for freely supported beams and at the point of inflection for fixed or continuous beams. Anchorage of negative reinforcing shall be toward the center of the beams from this point.

The length of bars added to the anchorage may be either straight or bent. The radius of bend shall be not less than four (4) bar diameters.

(d) Anchorage of reinforcement in continuous, restrained or partially restrained beams shall be the length of anchorage of the tensile negative reinforcement beyond the face of the support and shall be provided to develop full maximum tension by Formula 18. Such anchorage shall provide a length of bar not less than the depth of the beam. In the case of beams having a depth of less than three-fourths of the depth of the beam, the bars shall be bent down toward the support a distance not less than the effective depth of the beam. The portion of the bar so bent down shall be as near to the end of the beam as protective end supports which are not less than one-fourth of the beam's depth and shall be carried to or beyond the point of inflection. The end support shall be provided to provide an embedment of ten (10) or more bar diameters.

In simple beams or at the outer ends of freely supported end spans of continuous beams at least one-fourth of the area of the tensile reinforcement shall extend along the tension side of the beam and beyond the face of the support to provide an embedment of ten (10) or more bar diameters.

(e) Special anchorage in addition to that required in paragraph (d) shall be provided in beams where increased shearing stresses are used as provided in paragraphs (c), (d), (f) and (g) of Section 2615, or where increased bond stresses are used as provided in paragraph (e) of this Section.

Points of inflection of at least one-third the area of the negative reinforcement and beyond the face of the support of at least one-third the area of the positive reinforcement shall be provided to develop one-third of the maximum working stress in tension. The anchorage length x shall be computed by Formula 18, with bond stresses not greater than those specified in paragraph (b) of this section.

(2) At the edges of footings, anchorage for all the bars for one-third the maximum working stress in tension shall be provided within a region where the tension in the concrete, computed as an unreinforced beam, does not exceed 100 lbs. per sq. in. In any case the reinforcement bars shall extend to within four (4) inches of the edge of the footing but not closer than three (3) inches as specified in paragraph (d) of this Section.

(3) In simple beams or at the outer ends of freely supported end spans of continuous beams, at least one-half of the tensile reinforcement shall extend along the tension side of the beam to provide an embedment of ten (10) or more bar diameters.

(4) Anchorage of web reinforcement at both ends shall be by providing continuity of longitudinal reinforcement around the longitudinal axis of the beam and by providing a hook which has a radius not less than four (4) times the diameter of the web bar.

Stirrups shall be so provided in the compression and tension reinforcement of beams as to provide an embedment of ten (10) or more bar diameters in the stirrups at a point 0.3d from either face.

The end anchorage of a web member not in bearing on the longitudinal axis of the beam shall be provided in such a manner as to develop sufficient to prevent the bar from pulling out in all cases. The stirrups shall be carried as close to the upper and lower surfaces as practicable.

Sec. 2620. (a) Limitations. Flat-slab construction shall refer to concrete slabs having reinforcement bars extending in two or four directions, without beams or girders to carry the load to supporting columns. The length of the slab shall be not less than 10 times the thickness of the slab. The moment coefficients, moment distribution and slab thicknesses specified herein are for slabs which have three or more rows of reinforcement bars, and which are not subjected to concentrated loads.

(b) Panel Strips and Principal Design Section. A flat-slab panel shall be considered as consisting of strips as follows: (1) The strip parallel to the column center line and extending through the panel in the direction in which moments are being considered; (2) The strip perpendicular to the column center line and extending through the panel in the direction in which moments are being considered.

Two Column strips, each one-quarter panel in width, occupying the middle of the panel, shall be provided. The width of the panel, the panel is similarly divided by strips, the width of which are respectively one-half and one-fourth of the length of the panel. The principal design sections are located as follows:

(c) Sections for Negative Moment shall be taken along the edges of the panel; that is, along the lines joining the column centers. The column strips, the section shall be taken along the center line between the columns, the edge of the column capital and then around the circumference of the column capital for one-quarter (1/4) circumference.

Sections for Positive Moment shall be taken on the center line of the panel, crossing the strips for which moments are being considered.

(d) Moments in Interior Panels. Flat-slabs in which the ratio of positive moment, M_p , to negative moment, M_n , is not greater than 0.4, the numerical sum of the positive and negative moments in the direction of either side of a rectangular panel shall be not less than that given by Formula 19.

(e) Moments in End Panels. Flat-slabs in which the ratio of positive moment, M_p , to negative moment, M_n , is not greater than 0.4, the numerical sum of the positive and negative moments in the direction of either side of a rectangular panel shall be not less than that given by Formula 19.

(f) Moments in Principal Design Sections. The moments in the principal design sections shall be those given in the accompanying table of moments, except as follows:

(1) The ratio of the maximum negative moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.03%.

(2) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(3) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(4) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(5) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(6) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(7) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(8) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(9) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(10) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(11) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(12) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(13) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(14) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(15) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

(16) The maximum negative and the maximum positive moments in the two column strips may be greater or less than the values given in the table of moments by not more than 0.01%.

A close-up photograph of the top edge of a book's cover. The binding material is a dark, textured cloth. The spine is visible on the left, showing the stitching of the binding. The top edge of the cover is slightly irregular and shows some wear.

Other Vertical Openings

Sec. 3002. All shafts and other vertical openings not covered in Section 3002 shall have enclosing walls conforming to the requirements specified under Type of Construction of the building in which they are located when they exceed nine (9) square feet in area, and all other shafts shall be kept at least three (3) inches from the building exterior walls. All shafts shall be lined with not less than one-half inch asbestos, covered with not less than twenty-six (26) gauge sheet metal. Combustible material of partitions and floors through which the ducts pass shall be protected by not less than one-half inch of metal lining or be protected by not less than three-eighths (3/8) of an inch of plaster or one-fourth (1/4) of an inch of asbestos or plasterboard, and they shall be protected by not less than one-half inch of metal lining or they pass shall be filled with masonry and the floor construction through which they pass shall be filled with masonry or other incombustible material supported by wire baskets that prevent the passage of fire. All doors opening into such vertical shafts shall be of metal or shall be covered with not less than one-half inch of asbestos or shall be of metal or asbestos and not less than twenty-six (26) gauge metal returned around all edges and well fastened to the door. Windows in such shafts shall be of metal or shall be of wood or other incombustible material and shall be of wood entirely clad with metal of not less than twenty-six (26) gauge.

Piers

Sec. 2912. Hollow tile or concrete block or tile shall not be use

Sec. 2102. Concrete slabs shall not be less than two and one-half (2 1/2) inches thick. Topping when poured monolithic with the slab may be included as a structural part of the slab. Sleepers for the joists shall be placed in the direction of span and then shall not be placed more than one-half (1/2) inch into the slab. Concrete slabs shall be supported by joists, beams or girders and all such members shall be fireproofed as required by the Code. Consolation in Part V. Concrete joists shall be solidly bridged for later support. The span of the joists shall be 24 ft. and such bridging shall be the full depth and width of the joists.

[illegible]

The reinforced concrete or gypsum slab placed on and secured to the steel joists shall be sufficiently reinforced to support all dead, live and wind loads. The reinforcement shall be placed in cross bridged at not to exceed eight (8) foot intervals along the joists and shall be secured to the top chord of the joist at intervals not to exceed that allowed in Section 2702.

Sec. 3104. Milled Constructed Floors Mill constructed floors shall be not less than three (3) inches nominal for Type II buildings and grooved plank covered with one (1) inch nominal flooring laid crosswise or parallel to the wall. The floor shall be fastened to the wall by means of walls to allow for swelling in case the floor becomes wet, and one half inch space shall be covered by a moulding fastened to the wall by means of nails. The wall shall be fastened to the wall by means of movements of the floor. Corbeling of masonry walls under floor plan shall be omitted in place of such molding.

If laminated floors will be used, the laminations at the wall shall be omitted until after glazing and roofing has been completed.

(18) wide set screws shall be spaced at intervals of not less than four (4) inches; wide set screws shall edge close together and spiked ends shall overlap.

(19) continuous line will occur across the floor and such flooring shall not be removed until the joints are repaired. Joints shall be made only at the supports and at the quarter points where there is no change in slope.

(20) of such joints away from support. Joints between the planks of a handfasted floor shall be made and kept tight.

The framing, bracing, cutting and other work of supporting timbers shall comply with the requirements of Chapter 25.

Floor timbers shall be not less than six (6) inches nominal in either direction.

Sec. 3105. Wood joisted floors shall be framed and constructed and supported by wood stud, masonry or reinforced concrete walls as specified in Chapter 3100. Joisted floors need not be fire protected on the under side except where specifically required under Part V.

CHAPTER 32

ROOF CONSTRUCTION AND COVERING

General

Sec. 3201. Roof covering shall be as required under Occupancy in Part III, Location in Part IV or Types of Construction in Part V. All roofs shall be so framed and supported by walls and supporting walls as to form an integral part of the whole building.

Sec. 3202. The general rule for construction of floors as specified in Chapter 31 shall apply to roofs except that in Type II (2 1/2) inches nominal thickness, the minimum net section of the summer slabs shall be not less than two (2) inches in thickness, and the members well tightened before the slabs well fitted and shall have all top and bottom members well braced and shall have all top and bottom diagonal and sway bracing shall be used to brace all roof trusses. The minimum net section of the members shall be as specified in Chapters 25 and 27. The minimum net section of the members shall be used in determining the strength of the truss at any point.

Design

Sec. 2201. The design of the roof construction shall be in accordance with engineering regulations for the materials used.

Roof Coverings

Sec. 2204. Roof covering shall be required over all combustible roof construction and shall be of one of the classes specified in Section 4305 as they are specified under Occupancy in Part III, Location in Part IV and Types of Construction in Part V.

Access

Sec. 3205. All buildings shall have access provided to the attic space by means of a stairway or permanent ladder or a scuttle. The openings provided through the ceiling for such access into the attic shall be no larger than two feet by three feet (2'x3') and shall be located in the hallway or corridor of all Type III and V buildings three (3) stories or more in height.

Roof Drainage

Sec. 3206. Roofs of all buildings shall be sloped so that they will drain to gutters and downspouts which shall be connected with conductors to carry the water to the street.

Sec. 3301. All exits as required for buildings in this Code shall comply with the requirements specified in this Chapter for exits.

3309. Such smokeproof towers may be substituted for stairways wherever the latter are required in this Code.

Specified under types of Construction in Part V for that type of building in which such stairways are located, except as specified in Sections 3315 and 3316. All stairways of wood construction shall be protected on the under side by not less than one-hour fire-resistant construction as specified in Chapter 43. Metal stairways entirely enclosed as specified in this Chapter shall not be required to be fireproofed as required for floors in Part V of this Code. The provisions of this Chapter shall not apply to Group I buildings, except as specified.

General Design

Sec. 3302. All stairways and all platforms, landings and balconies forming a part of such stairway shall be designed to sustain an assumed live load of not less than one hundred (100) pounds per square foot.

There shall be no variation in the width of treads in any flight and the variation in height of nosings shall not exceed one-half inch.

The surface material of stair treads and landings shall be such as not to involve danger of slipping.

any point less than eight (8) inches exclusive of nosing.
Stairways and intermediate landing shall continue with no decrease in width along the direction of exit travel, except that when three or more stairways are required one half the required number of stairways may be combined at the second floor level with such combined width extending to the first floor level.

Arrangement and Access

Sec. 3303. One-half of the required number of stairways shall be

continued their full width to and through the roof by means of a penthouse in all buildings three stories or more in height; provided, that not more than one stairway shall be required to continue to and through the roof when the roof has a slope of more than six (6) inches for each twelve (12) inches of horizontal projection. In two story buildings scuttles not less than two feet by three feet (2'x3') shall be provided to and through the roof. Stairways leading to roofs of buildings shall be provided with a door or doors at the entrance to the roof.

All stairways shall lead to the street directly or by means of a yard, court or fire-resistive passageway having a width at least equal to the aggregate widths of all the exits discharging into it; provided, that not to exceed one-half of the required number of stairs may terminate at the second floor level provided they lead directly to a street

or alley front of the building and be provided with a balcony on the exterior of the building not less than three (3) feet wide and five (5) feet long. Such balcony shall be constructed of incombustible materials and when the floor of such balcony is located more than twelve (12) feet above the sidewalk directly below, such balcony shall be equipped with an approved counterbalanced stairway or ladder.

Where stairways discharge through the fire-resistive passageways, such means of egress shall be protected by fire-resistive construction.

such passageways shall be not less than seven (7) feet in clear height and with a width at least equal to the stairwells or stairways served by such passageways. All openings into such passageways shall be protected by one-hour fire-resistive doors as specified in Section 4304.

All exits shall be so arranged as to make clear the direction of egress to the exterior of the building and shall be so located that they are readily accessible and visible. When not visible to all occupants, adequate signs shall be provided to indicate their location. For build-

Stairways shall abut on not more than one side of an elevator enclosure.

Exit shall be so arranged that no part of any floor of a building is more than one hundred and fifty (150) feet distant from the opening of a required exit.

Doors

Sec. 3304. Doors shall not open immediately on a flight of stairs but on a landing at least equal to the width of the door.

1900

1894

Grades of	2402	For Group F buildings	1102, 1109	ENGINEERING REGULATIONS—quality and design of the ma-	301	Over heating plants	3707, 3708
Tests for determining grade	2403	For Group G buildings	1202, 1203	Live and dead loads	2301-2311, incl.	Over ranges in fire buildings	3711, 3712
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BRICK—CONCRETE		For Group J buildings	1502, 1509	For type of (see TYPE OF CONSTRUCTION)	2601-2622, incl.	FLUES	
Fire-resistive rating of	4301, 4302	COVERINGS		Steel and iron (quality and design)	2701-2718, incl.	Flue required	3701
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BRIDGING		Load to be provided for, when	1301	Of new buildings	201	For retaining wall	2300
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For steel joists	3714 (c)	Of hollow masonry	2907	Of wood construction	2506-2510, incl.	FOULDRY	
For wood joists	2506 (k)	Of reinforced concrete	3318	EXCAVATIONS		Concrete—design of	2622
BUILDING CODE		Of solid masonry	3301	Excavation details for	2501	Construction allowed (see TYPE OF BUILDING)	
Adopted when	4604	CORNICES (see TYPE OF BUILDING)		Water to be removed from, when	2609 (c)	Definition of	401
Application of	104	COST OF BUILDINGS—for permits	201, 202	EXHAUST VENTILATION		Design of	2306, 2307
Enforced by	102	COVERINGS		For dry cleaning establishments	1008	Excavations for	2801
Purpose of	103	For exteriors of frame buildings	2205	For motion picture machine booths	1008	Footings—Isolated	2306, 2307
Scope of	103	For fire protection	4303	EXTERIOR BUILDING		Inspection required for Type V buildings	2801
Title of	103	For roofs	4305	Application of Code to	104	Liability of adjoining property	2801
BUILDING INSPECTOR		For warm air ducts	3715	Definition of	401	May project beyond property line—when	4501 (e)
Acts as secretary	304	For hollow doors	4304	EXISTING WALLS		Owner's liability for	2801
Approves structural frame	204	CROSS AISLES IN BALCONIES		Extensions	2941	Rating for	2803
Approves registered inspector when	2710 (d)	Of Group A buildings	604 (f)	General requirements	3306, 3312	Soil bearing allowed	2803
Approves welding operator when	2710 (d)	Of Group B buildings	704 (e)	For Group A buildings	604 (f)	Stepped—when	2804
Certifies floor loads, when	2309	Of Group C buildings	804 (e)	For Group B buildings	704 (e)	Thickness of walls for Type V buildings	2804
Classifies buildings, when	2309	CURB		For Group C buildings	804 (e)	Walls of	2804
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May approve alternate construction or materials	202	CURTAIN		For Group F buildings	1101 (e)	Required when	204
May enter premises	202	For proscenium opening (see PROSCENIUM CURTAIN)		For Group G buildings	1201 (e)	FRAMING	
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May require registered inspector	202	CURTAIN WALL		For Group I buildings	1401 (e)	Of wood construction	2207
May require tests	302, 2401	Definition of	401	For Group J buildings	1501 (e)	FRAMEWORK—OF BUILDING (see TYPE OF BUILDING)	
May stop work	202	Hollow masonry—construction of	2909	EXIT LIGHTS		FRONT OF LOT	
Opinion necessary for change	1602 (e)	Reinforced concrete—construction of	2903	For Group A buildings	604 (f)	Definition of	401
Orders and duties	202	Solid masonry—construction of	2903	For Group B buildings	704 (e)	FRONTAGE CONSENT REQUIRED	
Record of permits required	202	D—occupancies		For Group C buildings	804 (e)	For storage of building materials	4401
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Shall make reports	204	Seating more than 3500	601	For Group E buildings	1004 (e)	Depth of foundations for	2938
Shall require reports	204	Seating from 500 to 3500	701	For Group F buildings	1101 (e)	Protection of concrete from	2609 (e)
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For changes of use or occupancy	104 (b)	Definition of	401, 2301	For Group J buildings	1501 (e)	diameter of not less than eleven (11) inches	3707
For removal of existing safeguards	104 (b)	DECORATIVE FEATURES—may project how	4501 (e)	EXPLANATION OF TERMS		FURRING	
For structural alterations	104 (d), 202	DECORATIVE FEATURES		General	401	Not allowed near chimney	2507 (h)
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Regulated by	1602 to 1605, incl.	Enclosure of vertical openings	3001-3003, incl.	Because of Type of Construction (see TYPE OF BUILDING)		For fire doors	3401
Require registered inspector, when	204	Excavations, footings and foundations	2801-2803, incl.	EXTERIOR WALLS—Requirements for		For horizontal exits, when	3311
To be condemned	301	Excavations, footings and foundations	2801-2803, incl.	Construction when in Fire Zone No. 2	1603 (a)	For picture machine booths	3311
To be occupied	301	Excavations, footings and foundations	2801-2803, incl.	For Group A buildings	604 (f)	For proscenium curtains	4104
To conform to Code, when	104	Excavations, footings and foundations	2801-2803, incl.	For Group B buildings	704 (e)	For stage ventilators	3901
BUILDING MATERIALS		Excavations, footings and foundations	2801-2803, incl.	For Group C buildings	804 (e)	For vents supplying air back stage	406
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BUILT UP TIMBERS		Excavations, footings and foundations	2801-2803, incl.	For Group E buildings	1004 (e)	GALVANIZED IRON	
BURNING TORCH		Excavations, footings and foundations	2801-2803, incl.	For Group F buildings	1101 (e)	Casing for patent chimneys	3704
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C—occupancies		Excavations, footings and foundations	2801-2803, incl.	For Group I buildings	1401 (e)	GARAGE	
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Of Change of use	207	Excavations, footings and foundations	2801-2803, incl.	For Group I buildings	1401 (e)	For Group A buildings	608
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Clerk—files appended documents	4602	Excavations, footings and foundations	2801-2803, incl.	For Group A buildings	604 (f)	Where constructed—how	3402
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Location on property	1102			For Group A buildings (large assemblage)	701-710, incl.		
Mixed occupancies—separation from	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Occupancies included	1102			For Group C buildings (small assemblage)	701-710, incl.		
Protection of exterior openings	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Special construction	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Special hazards	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Stairs and exits	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
GROUP L OCCUPANCY	1102			For Group H buildings (residential)	1301-1310, incl.		
Area	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Chimneys and heating apparatus	1102			For Group J buildings (accessory)	1501-1510, incl.		
Construction	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Definition of	1102			Classification of buildings	1701, 1702		
Enclosure of vertical openings	1102			For Group A buildings (large assemblage)	701-710, incl.		
Fire extinguishing apparatus	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Height	1102			For Group C buildings (small assemblage)	701-710, incl.		
Inflammable liquids—regulated	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Light, ventilation and sanitation	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Location on property	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Mixed occupancies—separation from	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
Occupancies included	1102			For Group H buildings (residential)	1301-1310, incl.		
Protection of exterior openings	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Special construction	1102			For Group J buildings (accessory)	1501-1510, incl.		
Special hazards	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Stairs and exits	1102			Classification of buildings	1701, 1702		
GROUP M OCCUPANCY	1102			For Group A buildings (large assemblage)	701-710, incl.		
Area	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Chimneys and heating apparatus	1102			For Group C buildings (small assemblage)	701-710, incl.		
Construction	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Definition of	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Enclosure of vertical openings	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Fire extinguishing apparatus	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
Height	1102			For Group H buildings (residential)	1301-1310, incl.		
Inflammable liquids—regulated	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Light, ventilation and sanitation	1102			For Group J buildings (accessory)	1501-1510, incl.		
Location on property	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Mixed occupancies—separation from	1102			Classification of buildings	1701, 1702		
Occupancies included	1102			For Group A buildings (large assemblage)	701-710, incl.		
Protection of exterior openings	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Special construction	1102			For Group C buildings (small assemblage)	701-710, incl.		
Special hazards	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Stairs and exits	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
GROUP N OCCUPANCY	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Area	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
Chimneys and heating apparatus	1102			For Group H buildings (residential)	1301-1310, incl.		
Construction	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Definition of	1102			For Group J buildings (accessory)	1501-1510, incl.		
Enclosure of vertical openings	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Fire extinguishing apparatus	1102			Classification of buildings	1701, 1702		
Height	1102			For Group A buildings (large assemblage)	701-710, incl.		
Inflammable liquids—regulated	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Light, ventilation and sanitation	1102			For Group C buildings (small assemblage)	701-710, incl.		
Location on property	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Mixed occupancies—separation from	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Occupancies included	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Protection of exterior openings	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
Special construction	1102			For Group H buildings (residential)	1301-1310, incl.		
Special hazards	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Stairs and exits	1102			For Group J buildings (accessory)	1501-1510, incl.		
GROUP O OCCUPANCY	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Area	1102			Classification of buildings	1701, 1702		
Chimneys and heating apparatus	1102			For Group A buildings (large assemblage)	701-710, incl.		
Construction	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Definition of	1102			For Group C buildings (small assemblage)	701-710, incl.		
Enclosure of vertical openings	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Fire extinguishing apparatus	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Height	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Inflammable liquids—regulated	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
Light, ventilation and sanitation	1102			For Group H buildings (residential)	1301-1310, incl.		
Location on property	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Mixed occupancies—separation from	1102			For Group J buildings (accessory)	1501-1510, incl.		
Occupancies included	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Protection of exterior openings	1102			Classification of buildings	1701, 1702		
Special construction	1102			For Group A buildings (large assemblage)	701-710, incl.		
Special hazards	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Stairs and exits	1102			For Group C buildings (small assemblage)	701-710, incl.		
GROUP P OCCUPANCY	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Area	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Chimneys and heating apparatus	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
Construction	1102			For Group G buildings (non-hazardous)	1201-1210, incl.		
Definition of	1102			For Group H buildings (residential)	1301-1310, incl.		
Enclosure of vertical openings	1102			For Group I buildings (dwellings)	1401-1410, incl.		
Fire extinguishing apparatus	1102			For Group J buildings (accessory)	1501-1510, incl.		
Height	1102			REQUIREMENTS BASED ON TYPE OF CONSTRUCTION	1701, 1702		
Inflammable liquids—regulated	1102			Classification of buildings	1701, 1702		
Light, ventilation and sanitation	1102			For Group A buildings (large assemblage)	701-710, incl.		
Location on property	1102			For Group B buildings (medium assemblage)	701-710, incl.		
Mixed occupancies—separation from	1102			For Group C buildings (small assemblage)	701-710, incl.		
Occupancies included	1102			For Group D buildings (hospitals and detention)	701-710, incl.		
Protection of exterior openings	1102			For Group E buildings (highly hazardous)	1001-1010, incl.		
Special construction	1102			For Group F buildings (moderately hazardous)	1101-1110, incl.		
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